HITACHI
Inspire the Next

PROJECTION COLOR TV

# Operating Guide for 51F710, 57F710, 65F710, 51F710S, 57F710S, 65F710S


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ULTRAVISION DIGITAL

As an ENERGY STAR® Partner, Hitachi, Ltd. has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

energy ENERGY STAR

# IMPORTANT SAFETY INSTRUCTIONS

**SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI TELEVISION**

Our reputation has been built on the quality, performance, and ease of service of HITACHI televisions.

Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your HITACHI television.

Please fill out your warranty card and mail it to HITACHI. This will enable HITACHI to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

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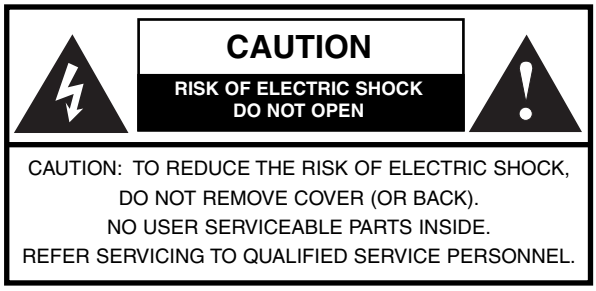
Follow all warnings and instructions marked on this television.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of a sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:
- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
- THE TELEVISION SHOULD NOT BE EXPOSED TO DRIPPING OR SPLASHING AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE TELEVISION.

**NOTE:**
- There are no user serviceable parts inside the television.
- Model and serial numbers are indicated on back side of the television.

**CAUTION:** Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by HITACHI could void the user's authority to operate the television.

**MODIFICATIONS:** The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi America, Ltd. Home Electronics Division may void the user's authority to operate the equipment.

**POWER SOURCE**

**THIS TELEVISION IS DESIGNED TO OPERATE ON 120 VOLTS 60Hz, AC CURRENT. INSERT THE POWER CORD INTO A 120 VOLT 60Hz OUTLET.**

**TO PREVENT ELECTRIC SHOCK, DO NOT USE THE TELEVISION'S (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.**

**NEVER CONNECT THE TELEVISION TO 50Hz, DIRECT CURRENT, OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.**

**NOTE:** This television receiver will display television closed captioning, (CC or ), in accordance with paragraph 15.119 and 15.122 of the FCC rules.

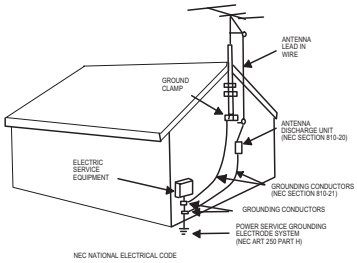
**CAUTION:** Never remove the back cover of the television as this can expose you to very high voltages and other hazards. If the television does not operate properly, unplug the television and call your authorized dealer or service center.

# IMPORTANT SAFETY INSTRUCTIONS

**Read before operating equipment**

Follow all warnings and instructions marked on this television.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use the attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Televisions are designed to comply with the recommended safety standards for tilt and stability.
    Do not apply excessive pulling force to the front, or top, of the cabinet which could cause the product to overturn resulting in product damage and/or personal injury.
16. Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
17. An outdoor antenna should not be located in the vicinity of overhead power lines or other electrical circuits.
18. If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode.


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUNDING CONDUCTORS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)
NEC NATIONAL ELECTRICAL CODE

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

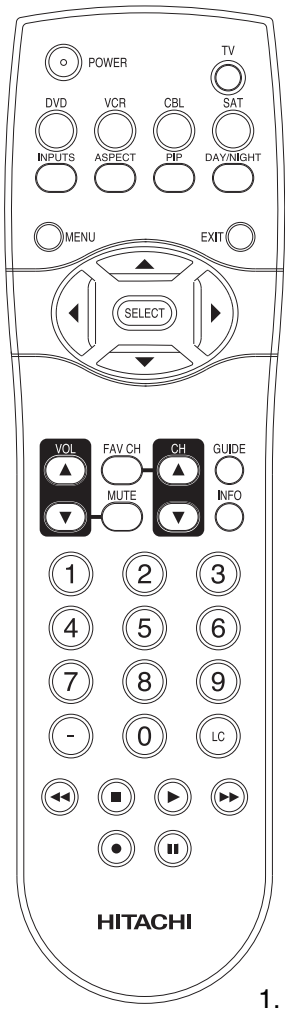
- This digital television is capable of receiving analog basic, digital basic and digital premium cable television programming by direct connection to a cable system providing such programming. A CableCARD provided by your cable operator is required to view encrypted digital programming. Certain advanced and interactive digital cable services such as video-on-demand, a cable operator's enhanced program guide and data-enhanced television services may require the use of a set-top box. For more information call your local cable company.
- Do not place any objects on the top of the television which may fall or cause a child to climb to retrieve the objects.
- Projection TV's are heavy and can mark or damage floor surfaces (especially wood flooring) if moved improperly. Do not slide or force TV into position. Always roll TV allowing casters at bottom of unit to help steer and position the TV.
- **PREVENTION OF SCREEN BURN**
  This Wide Screen TV is designed to display wide screen pictures. Images should be viewed mostly in wide screen format or zoomed to fit the screen with moving pictures. Use of side panels, top and bottom panels of standard picture formats should only be 15% of your total viewing time to prevent uneven aging of the phosphors. Phosphors in the lighted area of the picture will age more rapidly than the gray areas. Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to television receivers. Such "SCREEN BURNS" constitute misuse and are **NOT COVERED** by your HITACHI Factory Warranty.
- **PUBLIC VIEWING OF COPYRIGHTED MATERIAL**
  Public viewing of programs broadcast by TV stations and cable companies, as well as programs from other sources, may require prior authorization from the broadcaster or owner of the video program material.
- This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited consumer uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

**This product contains lead. Dispose of this product in accordance with applicable environmental laws. For product recycling and disposal information, contact your local government agency or the Electronic Industries Alliance at www.eiae.org (in the US) or the Electronic Product Stewardship Canada at www.epsc.ca (in Canada). For more information, call 1-800-HITACHI.**

# ACCESSORIES

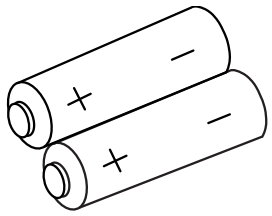
Check to make sure you have the following accessories before disposing of the packing material.

REMOTE CONTROL



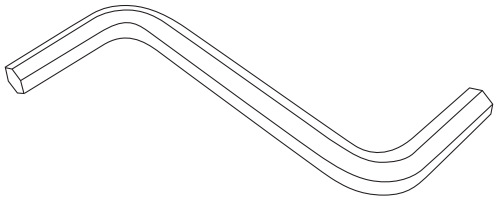

1.

BATTERIES
("AA")



2.

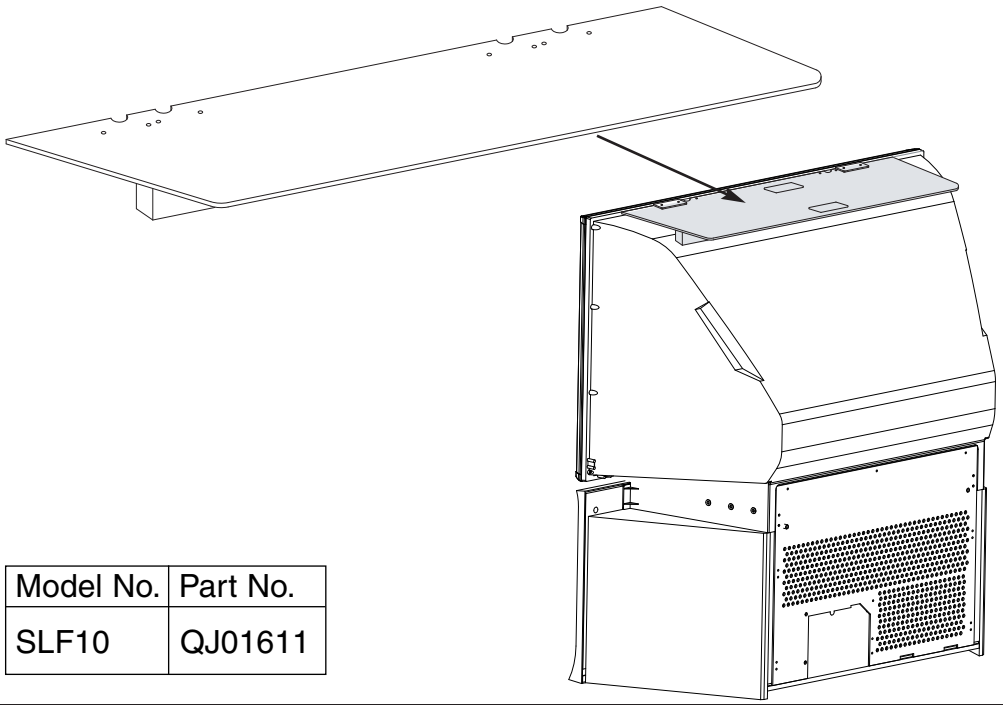
"Z" ALLEN KEY



For 57" and 65" Models Only

3.

OPTIONAL TV TOP SHELF (NOT INCLUDED, ORDER SEPARATELY)



| Model No. | Part No. |
|---|---|
| SLF10 | QJ01611 |

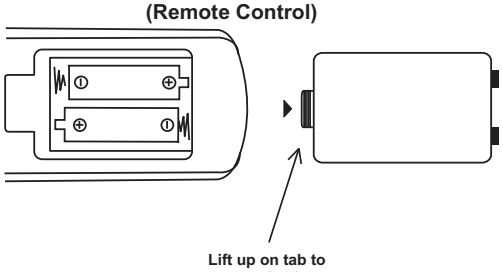
**CAUTION:** This SLF10 TV Top Shelf for use only with Hitachi 51F710, 51F710S and 57F710, 57F710S. Use with other apparatus is capable of resulting in instability causing possible injury.

1. Remote Control Unit CLU-4341UG2 (Part No. HL02071) or CLU4351UG2 (Part No. HL02072).
2. Two "AA" size, 1.5V batteries (For Remote Control Unit).
3. "Z" Allen Key (Part No. 61010122).

## REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

1. Open the battery cover of the remote control by pushing down and sliding the back cover off.
2. Insert two new "AA" size batteries for the remote control. When replacing old batteries, push them towards the springs and lift them out.
3. Match the batteries to the (+) and (-) marks in the battery compartment.
4. Replace the cover.

**BOTTOM VIEW**
**(Remote Control)**



**Lift up on tab to remove back cover.**

**CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace with the same or equivalent type.

# HOW TO SET UP YOUR NEW HITACHI PROJECTION TV



**ANTENNA**

Unless your TV is connected to a cable TV system or to a centralized antenna system, a good outdoor TV antenna is recommended for best performance. However, if you are located in an exceptionally good signal area that is free from interference and multiple image ghosts, an indoor antenna may be sufficient.

**LOCATION**

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set.
To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.

**NOTE:** Your new HDTV has a built-in high definition television signal processor. This television includes a fan to cool the processor. The sound of moving air from the fan is normal and maybe noticeable in very quiet environments.

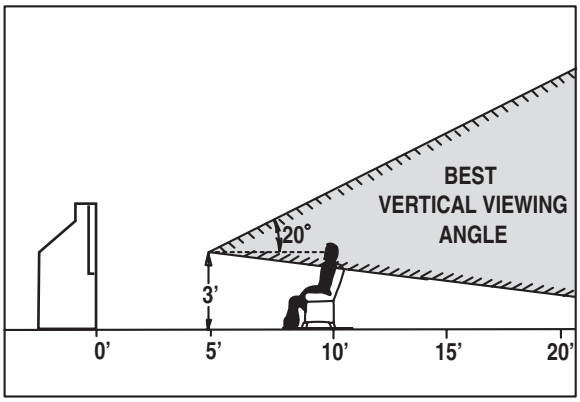
**VIEWING**

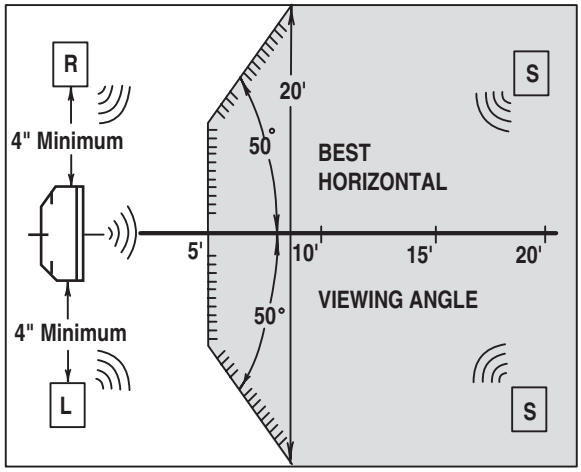
The major benefit of the HITACHI Projection Television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the optimum spot for viewing.

The best picture is seen by sitting directly in front of the TV and about 10 to 18 feet from the screen. Picture brightness decreases as the viewer moves to the left and right of the receiver.

During daylight hours, reflections from outside light may appear on the screen. If so, drapes or screens can be used to reduce the reflection or the TV can be located in a different section of the room.

If the TV's audio output will be connected to a Hi-Fi system's external speakers, the best audio performance will be obtained by placing the speakers equidistant from each side of the receiver cabinet and as close as possible to the height of the picture screen center. For best stereo separation, place the external speakers at least four feet from the side of the TV, place the surround speakers to the side or behind the viewing area. Differences in room sizes and acoustical environments will require some experimentation with speaker placement for best performance.

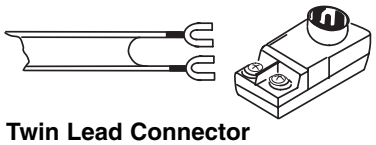



**CAUTION:** Magnetic fields, such as those of external speakers, may cause the picture to distort if they are placed too close to the television. Move the magnetic field source away from the television until there is no picture distortion.

# HOOK-UP CABLES AND CONNECTORS

Most video/audio connections between components can be made with shielded video and audio cables that have phono connectors. For best performance, video cables should use 75-Ohm coaxial shielded wire. Cables can be purchased from most stores that sell audio/video products. Below are illustrations and names of common connectors. Before purchasing any cables, be sure of the output and input connector types required by the various components and the length of each cable.

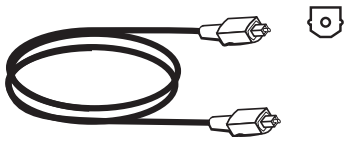


**300-Ohm Twin Lead Connector**
This outdoor antenna cable must be connected to an antenna adapter (300-Ohm to 75-Ohm).

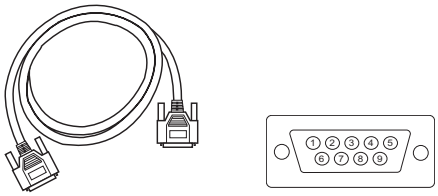
**Phono Connector**
Used on all standard video and audio cables which connect to inputs and outputs located on the television's rear jack panel and front control panel.

**"F" Type 75-Ohm Coaxial Antenna Connector**
For connecting RF signals (antenna or cable TV) to the antenna jack on the television.

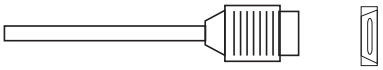
**S-Video (Super Video) Connector**
This connector is used on camcorders, VCRs and laser- disc players with an S-Video feature in place of the standard video cable to produce a high quality picture.



**Optical Cable**
This cable is used to connect to an audio amplifier with an Optical Audio In jack. Use this cable for the best sound quality.




**D-SUB MINI 9-Pin Cable**
This cable is used to connect to the RS232C input located on the rear panel so you can control some of your TV functions from an external home control system.



**HDMI Cable**
This cable is used to connect your external devices such as Set-Top-Boxes or DVD players equipped with an HDMI output connection to the TV's HDMI input.

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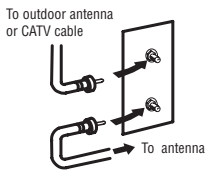
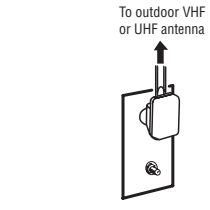
**ANTENNA CONNECTIONS TO REAR JACK PANEL**

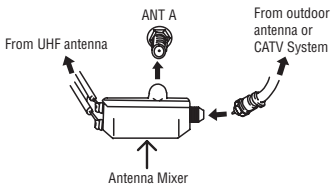
**VHF (75-Ohm) antenna/CATV (Cable TV)**
When using a 75-Ohm coaxial cable system, connect CATV coaxial cable to the ANT A (75-Ohm) terminal. If you have an antenna, connect the coaxial cable to the ANT B terminal.




**VHF (300-Ohm) antenna/UHF antenna**
When using a 300-Ohm twin lead from an outdoor antenna, connect the VHF or UHF antenna leads to screws of the VHF or UHF adapter. Plug the adapter into the antenna terminal on the TV.

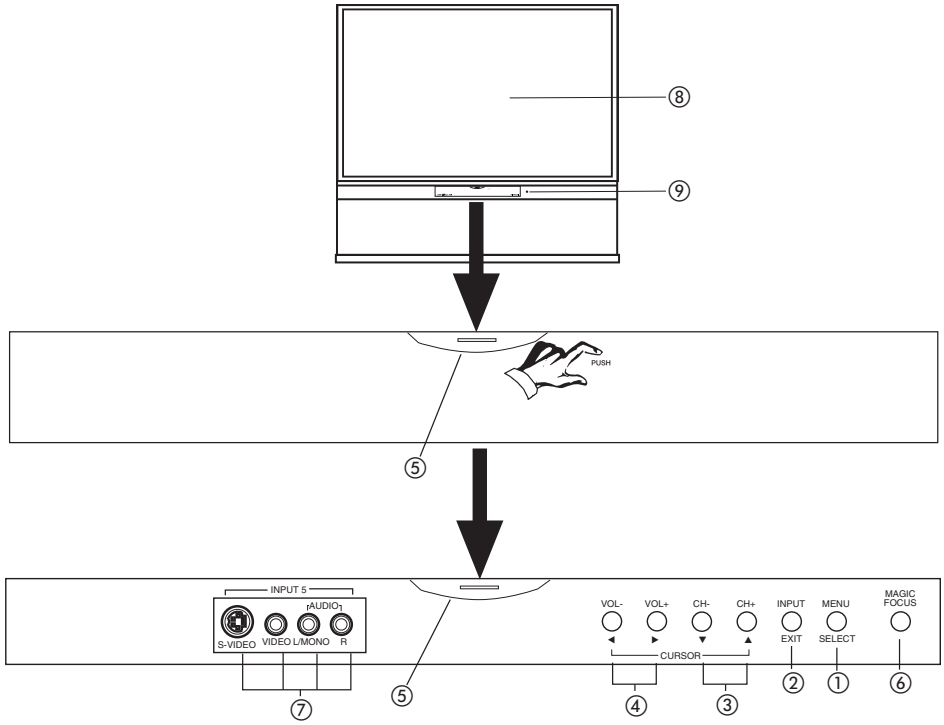



**When both VHF and UHF antennas are connected**
Attach an optional antenna cable mixer to the TV antenna terminal, and connect the cables to the antenna mixer. Consult your dealer or service store for the antenna mixer.



# FRONT PANEL CONTROLS






**① MENU/SELECT button**

This button allows you to enter the MENU, making it possible to set TV features to your preference without using the remote. This button also serves as the SELECT button when in MENU mode.

**② INPUT/EXIT button**

Press this button to display the input menu, Ant A/B, INPUT:1,2,3,4 and 5. This button also serves as the EXIT button when in MENU mode.

**③ CHANNEL selector**

Press these buttons until the desired channel appears in the top right corner of the TV screen. These buttons also serve as the cursor down (▼) and up (▲) buttons when in MENU mode.

**④ VOLUME level**

Press these buttons for your desired sound level. The volume level will be displayed on the TV screen. These buttons also serve as the cursor left (◄) and right (►) buttons when in MENU mode. When the TV power is turned OFF at a volume level 31 or greater, the volume level will default to 30 when the TV is turned ON. However, if it is set to a level 30 or less, the volume level will be at the level it was set when the TV is turned ON.

**⑤ POWER button/ POWER LED**

Press this button to turn the TV on or off. This LED light is on during normal operation. At initial TV Turn "ON", the Power button LED will blink several times before a channel can be tuned and viewed. This is a normal default operation of this television. The blinking time of the Power button LED varies depending on the period of time between when you turn "ON" and when you turn "OFF" the TV. This default operation is an energy saving feature. You can choose not to use this feature by selecting "On" for the "Quick Start Up" option in the On-Screen-Display Menu. Select "Setup" in the On-Screen-Display Menu, then select "Quick Start Up". Select the "On" feature to quickly tune and view channels at initial TV Turn "ON" (see page 64).

**⑥ MAGIC FOCUS**

Use this button to automatically adjust your picture quality to optimum performance (see page 55).

**⑦ FRONT INPUT JACKS (INPUT 5)**

Use these audio/video jacks for a quick hook-up from a camcorder or VCR to instantly view your favorite show or new recording. Press the INPUT button and select Input 5. If you have mono sound, insert the audio cable into the left audio jack.

**⑧ IR RECEIVER Sensor (1)**

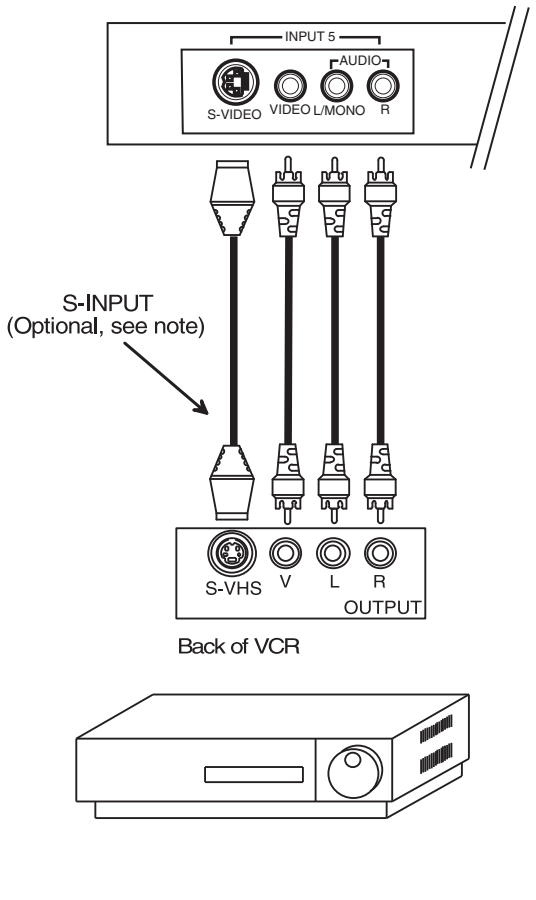
The screen area acts as one of the IR receivers (remote sensor) of the TV. When using the remote control, point it towards the screen for best response.

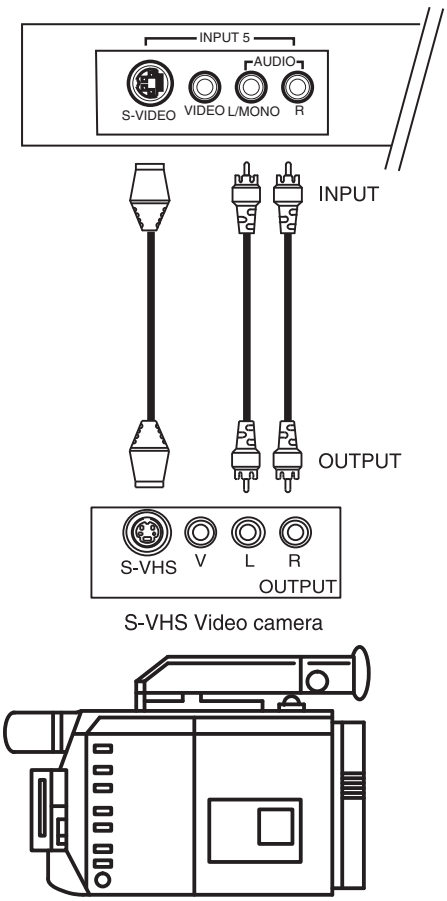
**⑨ IR RECEIVER Sensor (2)**

This is an additional remote sensor for a better remote control range of response.

# FRONT PANEL JACKS AND CONNECTORS

The front panel jacks are provided as a convenience to allow you to easily connect a camcorder or VCR as shown in the following examples:

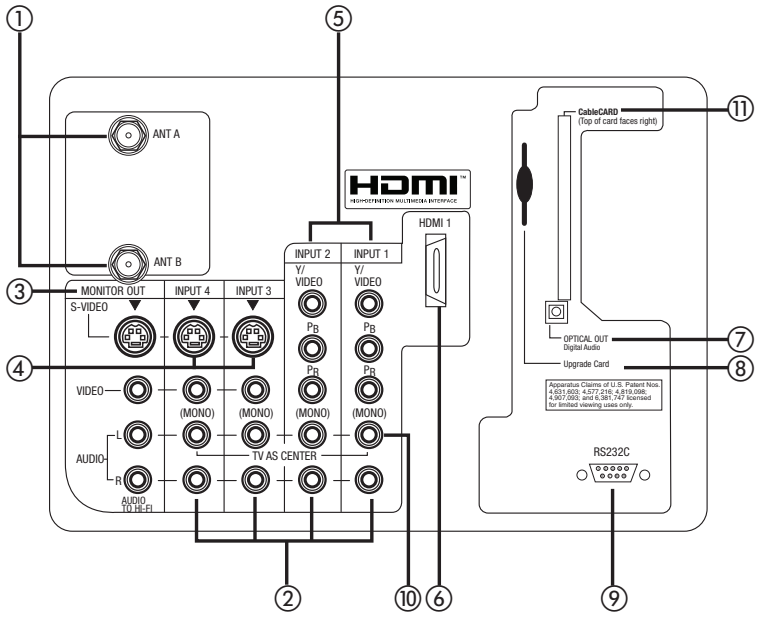



**NOTE:**
1. Completely insert connection cord plugs when connecting to front panel jacks. If you do not, the played back picture may be abnormal.
2. If you have a S-VHS VCR, use the S-INPUT cable in place of the standard video cable.
3. If you have a mono VCR, insert the audio cable into the left audio jack of your TV.

# REAR PANEL JACKS






① **Antenna Input**
**ANT A**- A 75-Ohm RF antenna or CATV (Cable TV) input. ANT A can be displayed as a main picture or sub-picture.
**ANT B**- A 75-Ohm RF antenna input. ANT B can only be displayed as a main picture. ANT B cannot be displayed as a sub-picture.

**NOTE:** You may ask your local cable company whether DTV services are available.

② **Audio/Video Inputs 1, 2, 3 and 4**
By using the INPUTS button, CURSOR buttons and SELECT button of the remote control you can select each video source. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players, DVD players etc. (If you have mono sound, insert the audio cable into the left audio jack.)

**NOTE:** You may use VIDEO or S-VIDEO inputs to connect to INPUT 3 and 4, but only one of these inputs may be used at a time.

③ **MONITOR OUT**
These jacks provide fixed or variable audio and video signals which are used for recording. Use the S-VIDEO Output for high quality video output (see page 63).

④ **S-VIDEO Inputs 3 and 4**
Inputs 3 and 4 provide S-VIDEO (Super Video) jacks for connecting equipment with S-VIDEO output capability.

⑤ **Component: Y-$P_BP_R$ Inputs**
Inputs 1 and 2 provide Y-$P_BP_R$ jacks for connecting equipment with this capability, such as a DVD player or Set Top Box. You may use composite video signal for both inputs.

**NOTES:**
1. Do not connect composite VIDEO and S-VIDEO to Input 3, 4 or 5 at the same time. S-VIDEO has priority over VIDEO input.
2. Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's $P_B$ input and the components R-Y output to the TV's $P_R$ input.
3. Your component outputs may be labeled Y-$C_BC_R$. In this case, connect the component $C_B$ output to the TV's $P_B$ input and the component $C_R$ output to the TV's $P_R$ input.
4. It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-$P_BP_R$ inputs (see page 37).
5. To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-$P_BP_R$ jacks.
6. Input 1 and Input 2 (Y/VIDEO) can be used for composite video and component video input.

# REAR PANEL JACKS

⑥ **HDMI1 (High Definition Multimedia Interface) (INPUT 1)**

About HDMI

HDMI is the next-generation all digital interface for consumer electronics. HDMI enables the secure distribution of uncompressed high-definition video and multi-channel audio in a single cable. Because digital television (DTV) signals remain in digital format, HDMI assures that pristine high-definition images retain the highest video quality from the source all the way to your television screen.

Use the HDMI input for your external devices such as Set-Top-Boxes or DVD players equipped with an HDMI output connection.

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

**NOTES:** 1. The HDMI input is not intended for use with personal computers.

2. Only DTV formats such as 1080i, 720p, 480i and 480p are available for HDMI input.

⑦ **Optical Out (Digital Audio)**

This jack provides Digital Audio Output for your audio device that is Dolby® Digital and PCM compatible, such as an audio amplifier.

**NOTE:** *Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

⑧ **Upgrade Card**

This card slot is for future software upgrades. Hitachi will notify you if a software upgrade is required for your TV. In order to receive written notification, please complete and return your warranty card.

⑨ **RS232C Input**

For use with third party home Audio/Video control systems which are commercially available. Please see your dealer regarding these "non Hitachi" home control systems (see page 64 to activate this input).

⑩ **TV AS CENTER (INPUTS 1-4)**

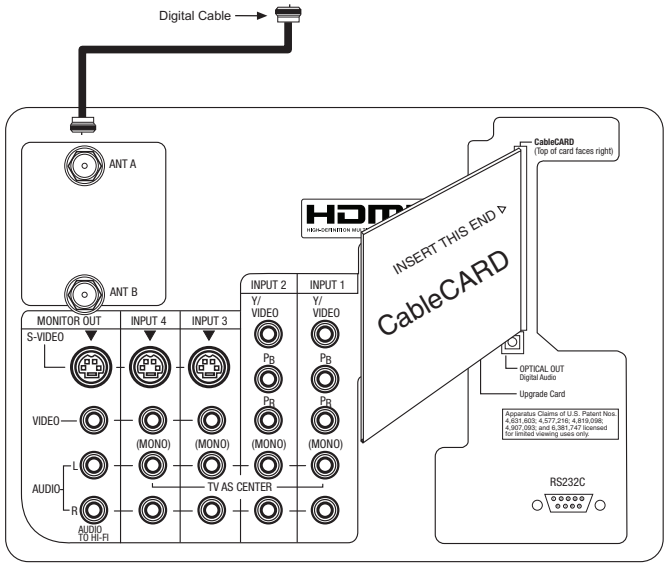
These jacks are for stereo amplifiers with center signal output capability. This feature allows the TV speakers to be used as a center speaker. The TV must be set as a center channel by selecting "TV as Center" on the Internal Speakers Settings of the Audio Menu (see page 41).

# REAR PANEL JACKS

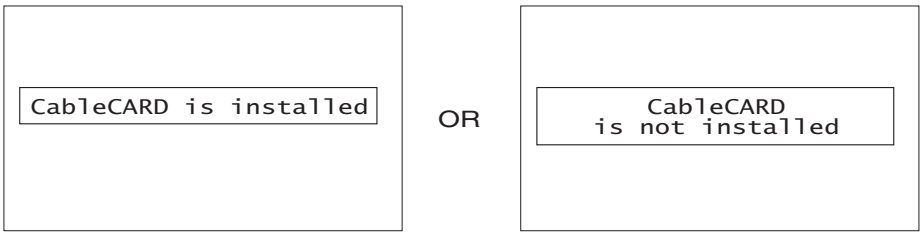
### ⑪ CableCARD Slot

This slot is for the CableCARD that will be provided by your local cable operator to gain access to chosen cable channels. The CableCARD will allow you to tune digital and high definition cable channels. Please call your local cable operator if this service is available before requesting a CableCARD (also known as Point of Deployment (POD) module).

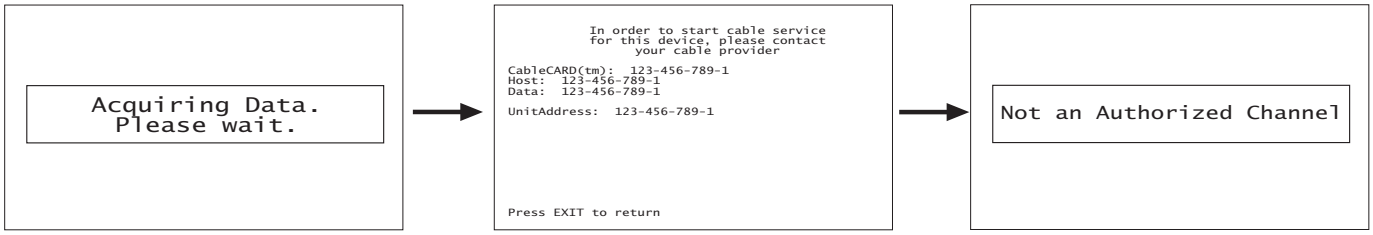
Connect a coaxial cable to ANT A terminal of the Rear Panel Jacks.
Insert the CableCARD into the slot (Top of card should be facing right as shown).




If the CableCARD is properly installed or not installed, the TV will display the following respective screens.




After the CableCARD is installed, wait until the second screen below appears. The third screen below will appear if a channel is not authorized for viewing. Press the EXIT button to exit the second screen.

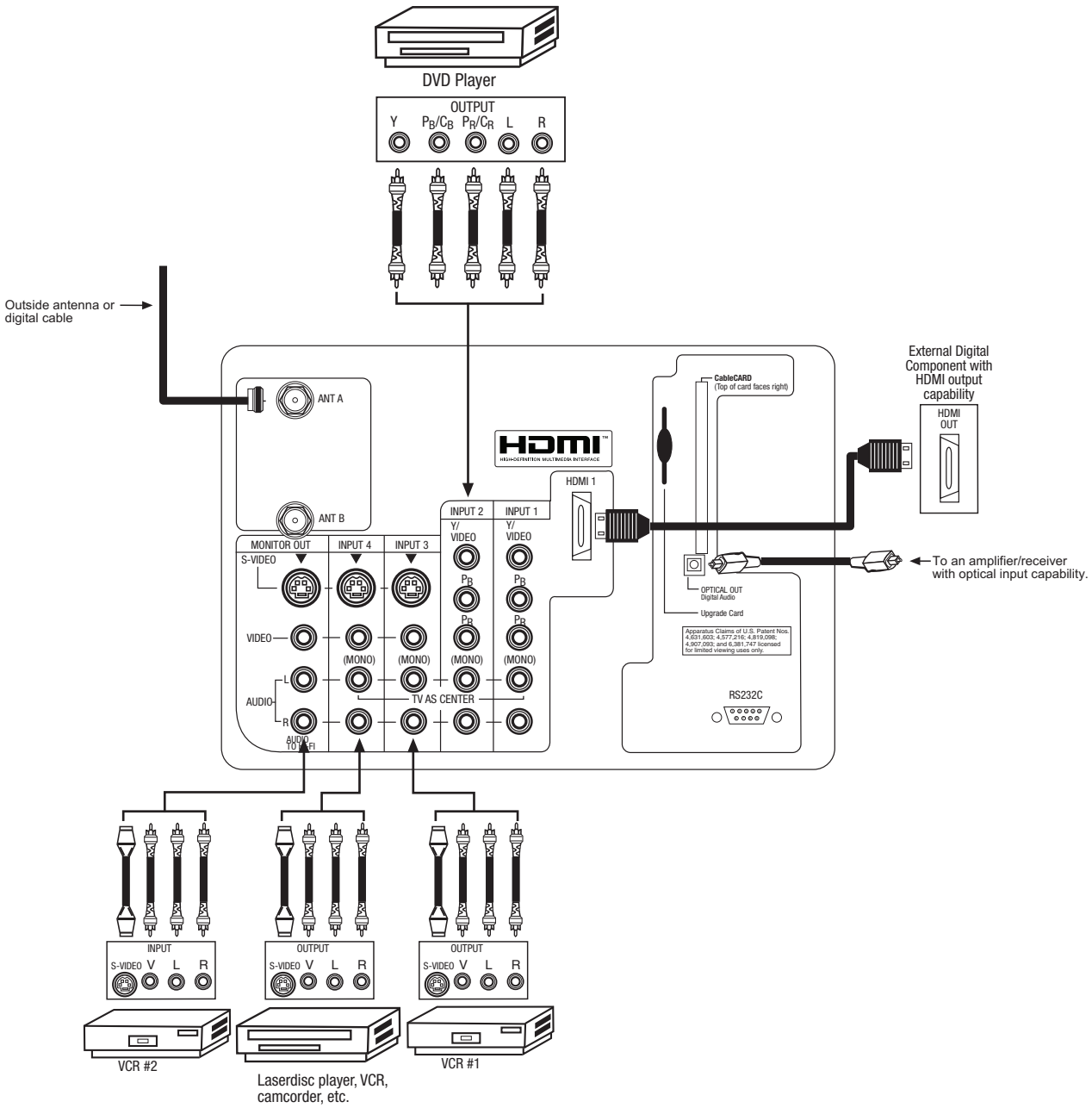



Please take note of all information on the screen (you will provide this information to your cable operator). Call your cable operator and give them the information from the card to start your cable service.

**NOTES:**
1. A digital cable subscription is required.
2. Antenna B will not be available when CableCARD is inserted.
3. Do not insert a PCMCIA card into the CableCARD slot.

# REAR PANEL CONNECTIONS

## TYPICAL FULL-FEATURE SETUP




**NOTES:**
1. Connect only 1 component to each input jack.
2. Follow connections that pertain to your personal entertainment system.
3. Inputs 1 and 2 can accomodate Composite and Component video signals.
4. Cables are not included with the purchase of this TV, except when noted as “provided”.

# TIPS ON REAR PANEL CONNECTIONS

- S-VIDEO, Y-PbPr and HDMI connections are provided for high performance laserdisc players, VCRs etc. that have this feature. Use these connections in place of the standard video connection if your device has this feature.
- If your device has only one audio output (mono sound), connect it to the left audio jack on the television.
- Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.
- A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 3 in the example on page 12). Refer to your VCR operating guide for more information on line input-output connections.
- You may use VIDEO or S-VIDEO inputs to connect to Input 3, Input 4 or Input 5, but only one of these may be used at a time.
- Connect only 1 component (VCR, DVD player, camcorder, etc.) to each input jack.
- COMPONENT: Y-$P_BP_R$ (Input 1 & 2) connections are provided for high performance components, such as DVD players and set-top-boxes. Use these connections in place of the standard video connection if your device has this feature. Input 2 accepts both composite and component video signals.
- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's $P_B$ input and the components R-Y output to the TV's $P_R$ input.
- Your component outputs may be labeled Y-$C_BC_R$. In this case, connect the components $C_B$ output to the TV's $P_B$ input and the components $C_R$ output to the TV's $P_R$ input.
- You may use composite and component video signals for Inputs 1 and 2.
- It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-$P_BP_R$ inputs (see page 37).
- To ensure no copyright infringement, the MONITOR OUT output may be abnormal, when using the Y-$P_BP_R$ jacks.
- When using an HDMI input from a Set-Top-Box, it is recommended that a 1080i or 720p input signal is used.

# CONNECTING EXTERNAL AUDIO SOURCES

Match the numbers below to the diagram for speaker placement.

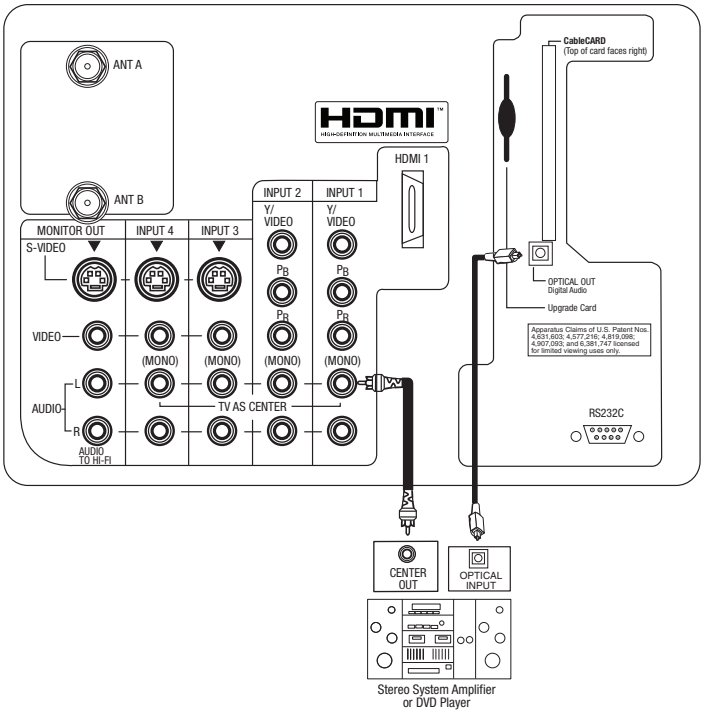
(1) The television's internal speakers will act as center speaker (select Audio-Internal Speakers-TV as Center).

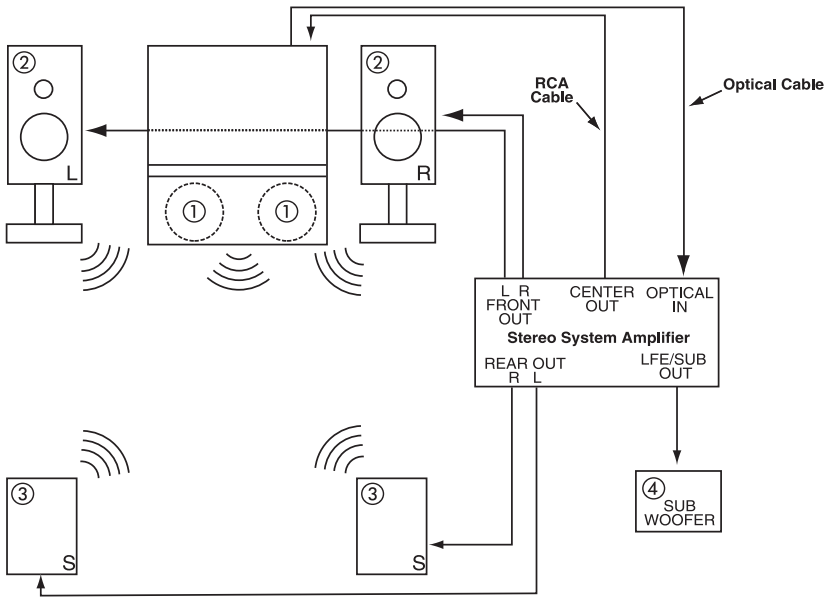
(2) These FRONT left and right speakers are connected to the FRONT output of a separate audio amplifier.

(3) These REAR left and right speakers are connected to the REAR output of a separate audio amplifier.

(4) This subwoofer is connected to the LFE/Sub Out output of a separate audio amplifier.

**REAR PANEL OF TELEVISION**




**NOTES:**
1. The Optical Out (Digital Audio) provides a fixed digital audio output to your external component such as an A/V receiver with optical input capability. The audio level can only be controlled through the volume control of the external audio amplifier.
2. See page 42 for AUDIO-Digital Output.

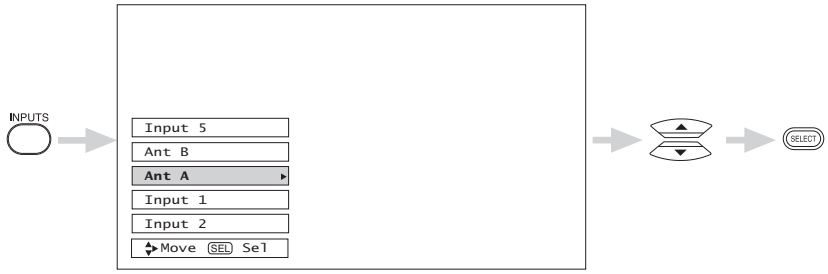
# CONNECTING EXTERNAL VIDEO SOURCES



The exact arrangement you use to connect the VCR, camcorder, laserdisc player, DVD player, or HDTV Set Top Box to your TV set is dependent on the model and features of each component. Check the owner's manual of each component for the location of video and audio inputs and outputs.

The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

**Before Operating External Video Source**
Connect an external source to the INPUT terminal, then press the INPUTS button to show the INPUTS menu. Use the CURSOR PAD to select the Antenna and Input of your choice. Then press the SELECT button to confirm your choice (see page 24).




**NOTE:** When the TV is set to VIDEO and a video signal is not received from the VIDEO INPUT JACK on the back panel of the TV (i.e., VCR/laserdisc player, etc. is not connected or the video device is OFF), the set will appear to be OFF.

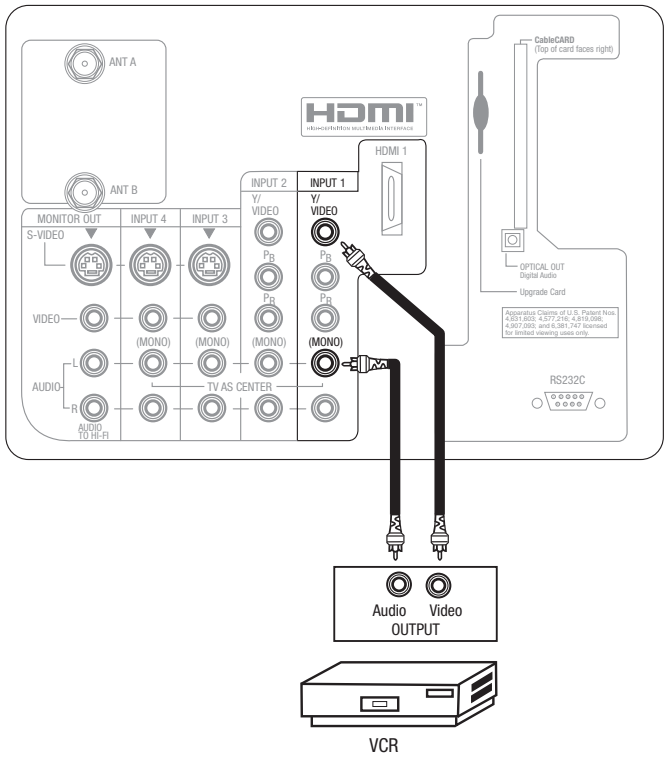
**CONNECTING A MONAURAL AUDIO SOURCE TO INPUT1~INPUT5**

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the TV set below.

2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.

3. Press the INPUTS button, then select INPUT 1 from the INPUTS menu to view the program from the VCR or the laserdisc player. The VIDEO OSD label disappears automatically after approximately four seconds.

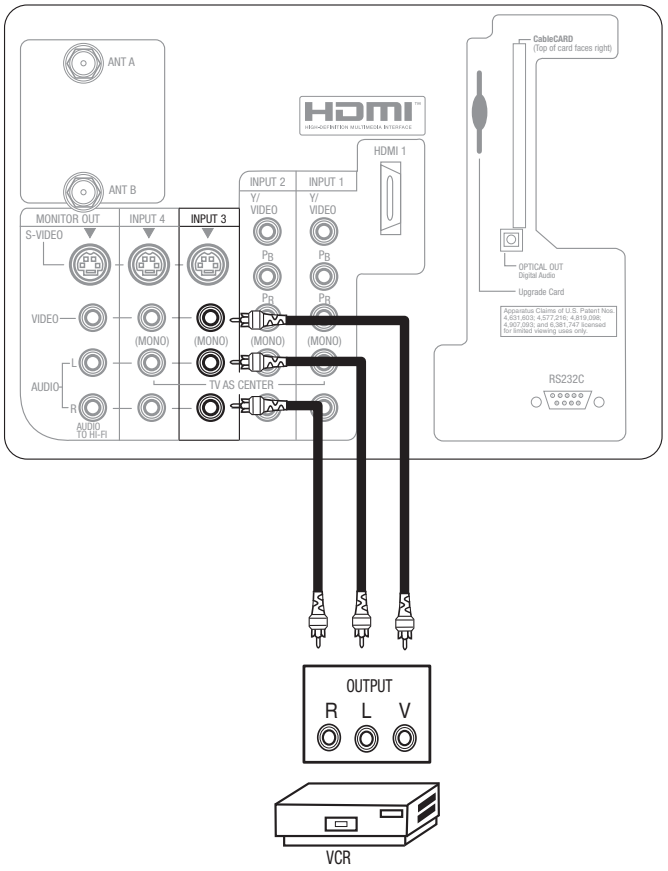
4. Select Antenna from the INPUTS menu to return to the previous channel.



# CONNECTING EXTERNAL VIDEO SOURCES

**CONNECTING A STEREO SOURCE TO INPUT1~INPUT5**

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the TV set below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUTS button, then select INPUT 3 from the INPUTS menu to view the program from the VCR or laserdisc player. The VIDEO OSD label disappears automatically after approximately four seconds.
5. Select Antenna from the INPUTS menu to return to the previous channel.




**NOTES:**

1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. A single VCR can be used for VCR #1 and VCR #2 (see page 12), but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.

# CONNECTING EXTERNAL VIDEO SOURCES



**CONNECTING AN S-VIDEO SOURCE TO INPUT 3, 4 AND 5**

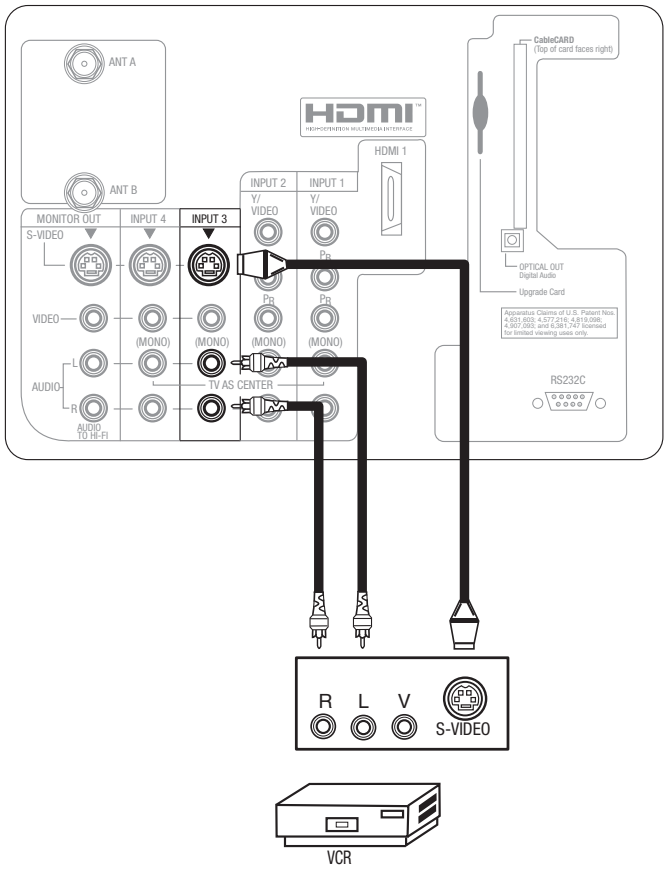
1. Connect the cable from the S-VIDEO OUT of the VCR or the laserdisc player to the INPUT (S-VIDEO) jack, as shown on the TV set below.

2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.

3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.

4. Press the INPUTS button, then select INPUT 3 from the INPUTS menu to view the program from the VCR or laserdisc player. The VIDEO OSD label disappears automatically after approximately four seconds.

5. Select Antenna from the INPUTS menu to return to the previous channel.




| | |
|---|---|
| **NOTES:** | 1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose. |
| | 2. A single VCR can be used for VCR #1 and VCR #2 (see page 12), but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections. |

# CONNECTING EXTERNAL VIDEO SOURCES

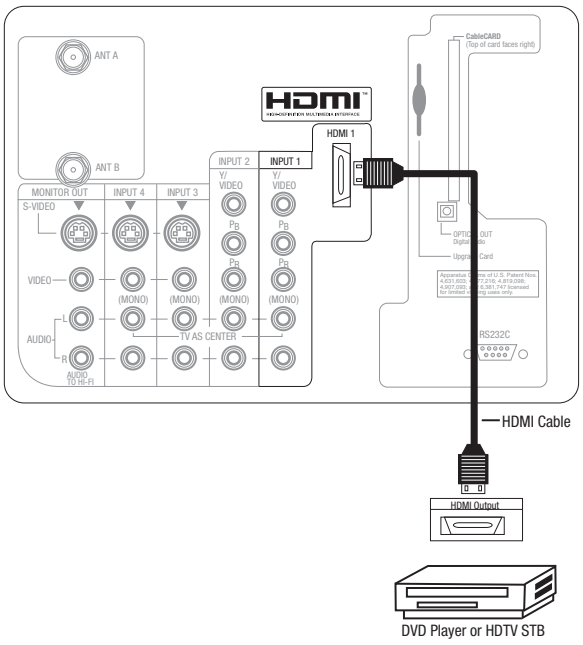
**CONNECTING A COMPONENT SOURCE WITH HDMI or DVI CAPABILITY TO INPUT 1**

1. Connect the HDMI or DVI to HDMI connection cable from the output of the HDTV set top box or DVD player to the HDMI input as shown on the TV set below. When using a component with DVI output, you also have to connect the AUDIO OUT (R/L) of the component to the AUDIO IN (R/L) of INPUT 1.

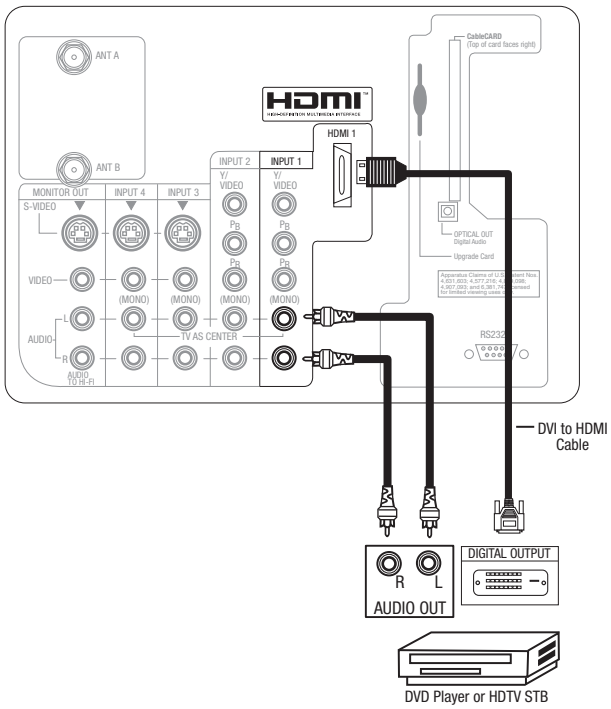
2. Press the INPUTS button, then select INPUT 1 from the INPUTS menu to view the program from the HDTV set top box or DVD player. The VIDEO OSD label disappears automatically after approximately four seconds.

3. Select Antenna from the INPUTS menu to return to the previous channel.

**HDMI-HDMI**




**DVI-HDMI**




**NOTES:**

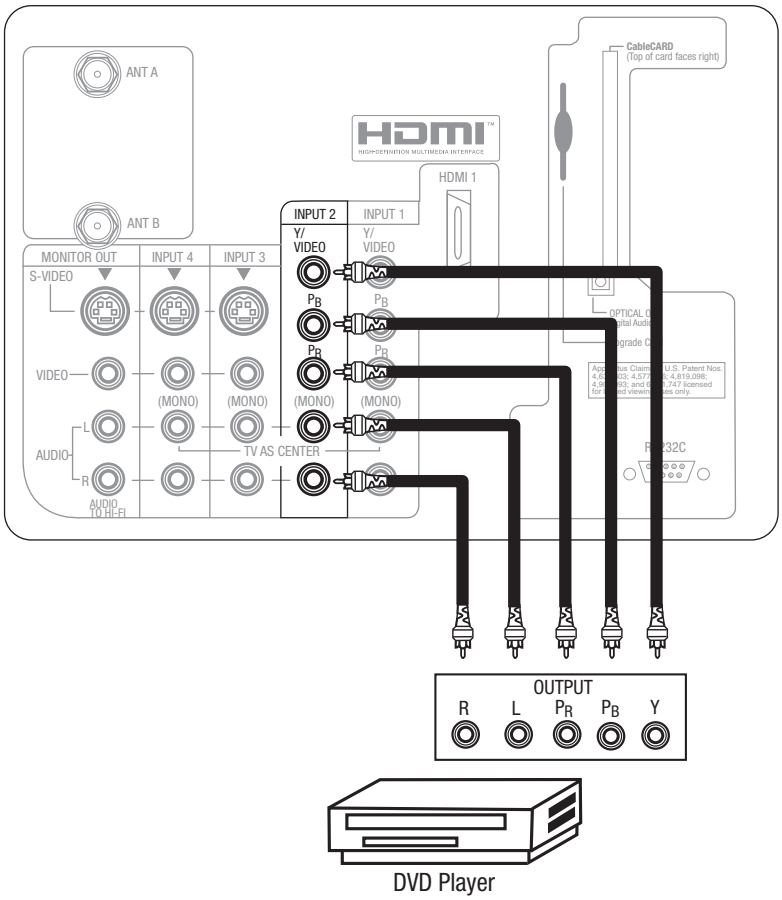
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. The HDMI input on INPUT 1 contains the copy protection system called High-bandwidth Digital Content Protection (HDCP). HDCP is a cryptographic system that encrypts video signals when using HDMI connections to prevent illegal copying of video contents.
3. HDMI is not a “NETWORK” technology. It establishes a one-way point-to-point connection for delivery of uncompressed video to a display.
4. The connected digital output device controls the HDMI interface so proper set-up of device user settings determines final video appearance.

# CONNECTING EXTERNAL VIDEO SOURCES



**CONNECTING A COMPONENT SOURCE TO INPUT 1 OR 2: Y-$P_BP_R$.**

1. Connect the cable from the Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (Y) jack, as shown on the TV set below.
2. Connect the cable from the $C_B/P_B$ OUT or B-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT ($P_{B)}$ jack.
3. Connect the cable from the $C_R/P_R$ OUT or R-Y OUT of the laserdisc/DVD player or HDTV set top box to the INPUT ($P_R$) jack.
4. Connect the cable from the AUDIO OUT R of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/R) jack.
5. Connect the cable from the AUDIO OUT L of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/L) jack.
6. Press the the INPUTS button, then select INPUT 2 from the INPUTS menu to view the program from the Laserdisc/DVD player or HDTV set top box. The VIDEO OSD label disappears automatically after approximately four seconds.
7. Select Antenna from the INPUTS menu to return to the previous channel.




**NOTES:**
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. See page 13 for tips on REAR PANEL CONNECTIONS.

In addition to controlling all the functions on your HITACHI Projection TV, the new remote control is designed to operate different types of VCRs, CATV (Cable TV) converters, set-top-boxes, satellite receivers (SAT) and DVD players with one touch. Basic operation keys are grouped together in one area.

To operate your TV, point the remote control at the screen of the TV and press the TV button. The remote will now control your television.

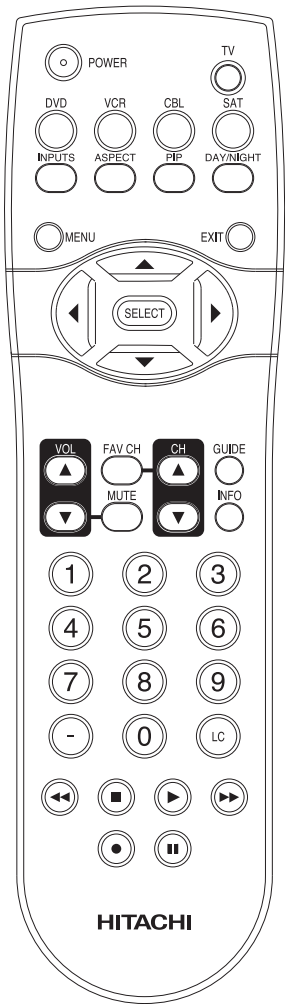
To operate your VCR, point the remote at the remote sensor of the VCR and press the VCR button. The remote will now control your VCR (see page 32 for instructions on how to program the remote to control your VCR).

To operate your cable box, point the remote at the remote sensor of the cable box and press the CABLE (CBL) button. The remote will now control your cable box (see page 29 for instructions on how to program the remote to control your cable box).

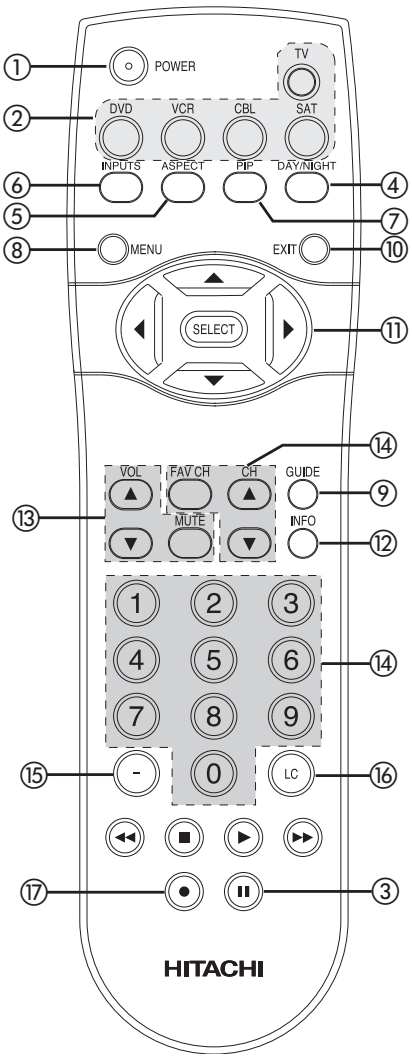
To operate your set-top-box or satellite receiver, point the remote at the remote sensor of the set-top-box or satellite receiver and press the SAT button. The remote will now control your set-top-box or satellite receiver. If you have a satellite receiver, use this button to program your satellite receiver (see page 30 for instructions on how to program the remote to control your SAT).

To operate your DVD player, point the remote at the remote sensor of the DVD player and press the DVD button. The remote will now control your DVD player (see page 31 for instruction on how to program the remote to control your DVD player).





# HOW TO USE THE REMOTE TO CONTROL YOUR TV

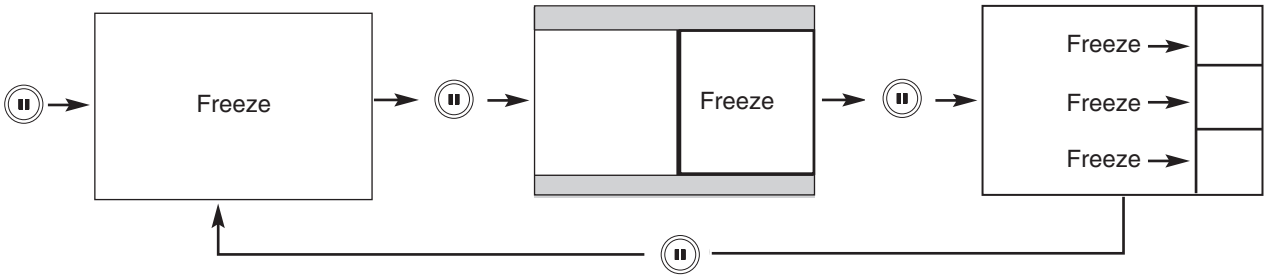





① **POWER button**
Press this button to turn the TV set on or off when the remote is in TV mode. (See page 20 for instructions on how to set the remote control to TV mode.)

② **MODE buttons**
These buttons allow the remote to control your TV, VCR, DVD, Cable box/Satellite box depending on which button is pressed.

③ **PAUSE button**
Press the PAUSE button to freeze the picture. Press the EXIT button to return the picture to motion. Press the PAUSE button repeatedly to cycle through the three different freeze modes (see page 28).



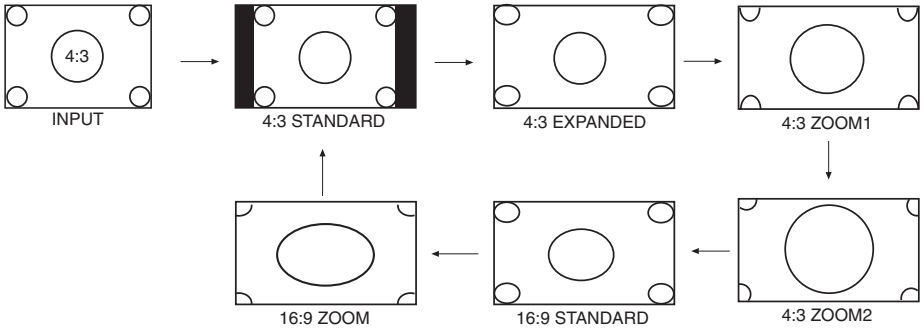

④ **DAY/NIGHT button**
Press this button to toggle between Day and Night picture mode settings. Select Day for day time viewing with more brightness and contrast to compete with room light. Select Night for night time viewing with less brightness and contrast for a more detailed picture (see page 36 for settings changes).

⑤ **ASPECT button**
Press this button to quickly change the picture format ASPECT ratio.

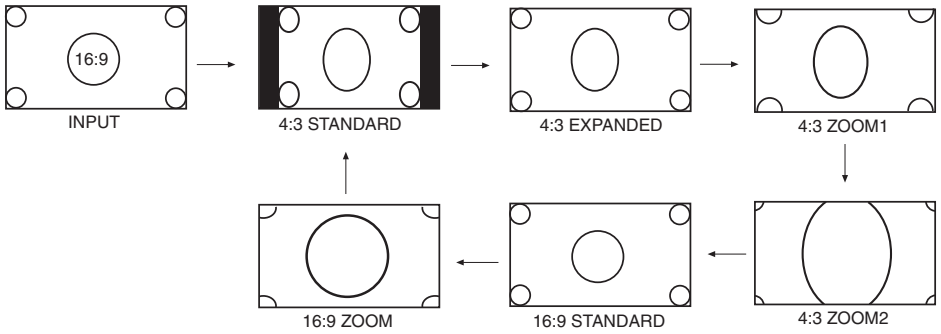
Depending on the input signal format received, the picture format ratio allows you to adjust the images through the following options.

| | |
|---|---|
| 4:3 STANDARD | Use this aspect mode to display conventional (4:3) images. Side panels (gray areas) are placed to the left and right of the image to preserve the original aspect ratio of the source. Note: Use this mode for only 15% of your total viewing time to prevent uneven aging of the phosphors. Phosphors in the lighted area of the picture will age more rapidly than the gray areas. |
| 4:3 EXPANDED | Use this aspect mode to display conventional (4:3) sources by linearly increasing image expansion from the center towards the edges of the display area in order to fill it. |
| 4:3 Zoom1/Zoom2 | Use these aspect modes to zoom in on conventional (4:3) sources. |
| 16:9 STANDARD | Use this aspect mode to display 16:9 sources like HDTV and DVD's preserving the original 16:9 aspect ratio. |
| 16:9 Zoom | Use this aspect to Zoom-in once while in 16:9 aspect. |

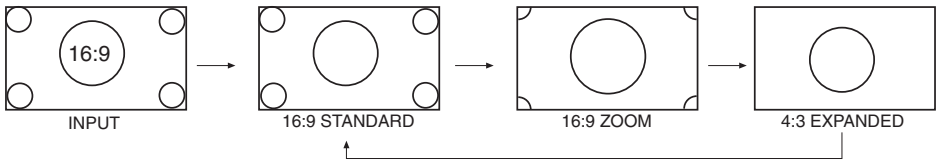
(1) NTSC/480i/480P Input




(2) 480i/480P Input



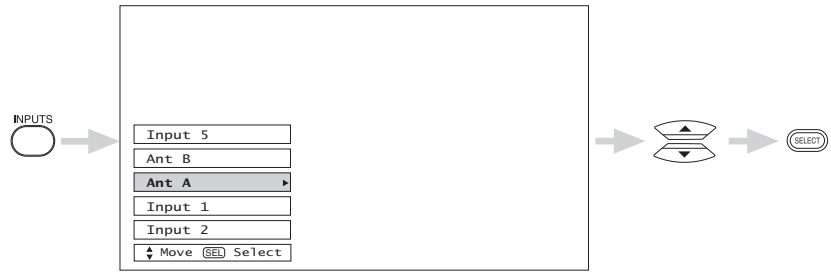

(3) HDMI/720P/1080i Input




**NOTES:**
1. The Aspect Style setting you select for an ANT input will automatically be set for the other ANT input. However, all five video inputs have independent Aspect Style settings.
2. Vertical position adjustments are directly available when you choose 4:3 EXPANDED/ZOOM1/ZOOM2 or 16:9 ZOOM aspect style (see also page 43).

⑥ **INPUTS button**

When the remote control is in TV mode, press this button to access the INPUTS menu. Use the CURSOR and SELECT buttons to select the inputs that are being used. Pressing the INPUTS button repeatedly will also cycle through the Inputs menu items. Then press the SELECT button to select.




| | |
|---|---|
| **Ant B** | Select to choose Antenna B. |
| **Ant A** | Select to choose Antenna A. |
| **Input 1** | Select to choose Input 1 for Video 1. |
| **Input 2** | Select to choose Input 2 for Video 2. |
| **Input 3** | Select to choose Input 3 for Video 3. |
| **Input 4** | Select to choose Input 4 for Video 4. |
| **Input 5** | Select to choose Input 5 for Video 5. |

⑦ **PICTURE-IN-PICTURE button**
See separate section on pages 26-28 for a description.

⑧ **MENU button**
The MENU button will start the On-Screen Display.

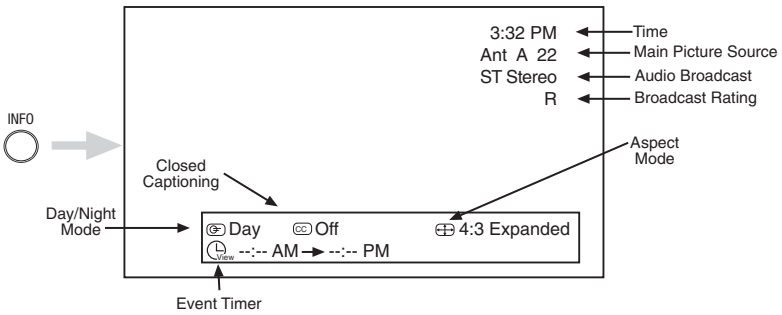
⑨ **GUIDE button [Cable Box (CBL), Satellite Receiver (SAT)/Set-Top-Box (STB) mode only]**
The use of this button is only applicable when the remote control is in (CBL) and (SAT/STB) mode. Press this button to access the Channel Guide of the (CBL), and (SAT/STB).

⑩ **EXIT button**
This button will exit all On-Screen Displays.

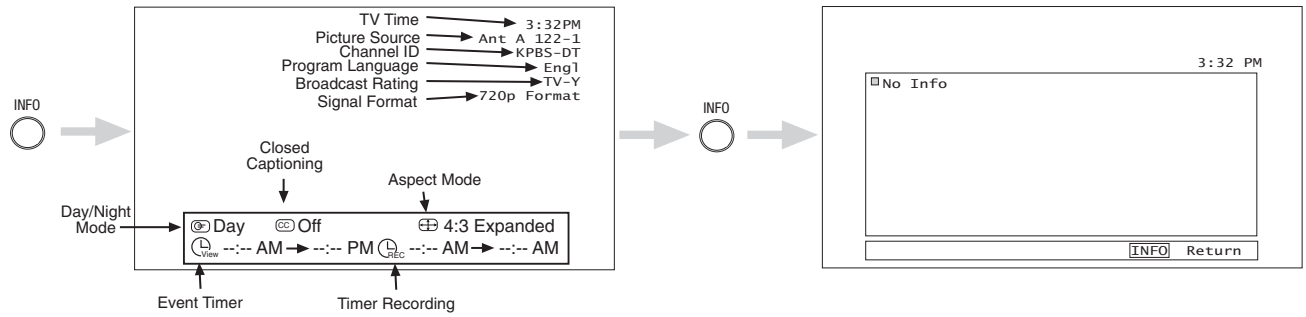
⑪ **CURSOR buttons/SELECT button**
All the On-Screen Display features can be set or adjusted by using the CURSOR buttons and the SELECT button, except for numeric entries. Press the CURSOR buttons toward desired direction and press the SELECT button to select.

⑫ **INFO button**
Press this button when you want to check the channel being received, the picture source, if the channel has stereo (ST) or second audio program (SAP), the time, CHANNEL ID and if the TIMER is set.

ANALOG CHANNELS




DIGITAL CHANNELS



When an S-VIDEO Input is connected to VIDEO: 3.

When a COMPONENT VIDEO: Y-$P_BP_R$ Input is connected to VIDEO: 1.

**NOTES:**
1. The Sleep Timer info will show momentarily after releasing INFO button.
2. Press the INFO button again or the EXIT button to return to normal viewing.

⑬ **VOLUME (VOL), MUTE button**
Press the VOLUME button (▲ or ▼) until you obtain the desired sound level.

To reduce the sound to one half of normal volume (SOFT MUTE) to answer the telephone, etc., press the MUTE button. Press the MUTE button again to turn the sound off completely (MUTE). To restore the sound, press the MUTE button one more time, or VOL Up (▲).

Closed Captioning will display automatically when MUTE/SOFT MUTE is on and Closed Caption is set to AUTO (see page 62).

When the TV power is turned off at a volume level 31 or greater, the volume level will default to 30 when the TV is turned on. However, if it is set to a level 30 or less, the volume level will be at the level it was set when the TV is turned ON.

⑭ **CHANNEL SELECTOR/FAVORITE CHANNEL (FAV CH) buttons**
The CHANNEL SELECTOR buttons are used to select channels, lock access code, etc. Use the CHANNEL SELECTOR buttons to enter one, two, or three numbers to select channels. Enter "0" first for channels 1 to 9, or simply press the single digit channel you wish to tune then wait a few seconds for the TV to tune. Channel selection may also be performed by CHANNEL (CH) up (▲) or CHANNEL (CH) down (▼).

Press the FAV CH button to switch to Favorite (FAV) channel mode. You will know you are in Favorite Channel mode when (FAV) is displayed and the displayed channel is GREEN. Press it again to return to your regular tuned channels. You can add any channel to your Favorite channel list by pressing and holding down the FAV CH button until the displayed channel turns from WHITE to highlighted GREEN. You can also delete a channel from your favorite channel list by pressing and holding down the FAV CH button until the displayed channel turns highlighted GREEN to WHITE.

⑮ **(-) DASH button**
The (-) DASH button can only be used when the remote control is in Satellite (SAT) mode.

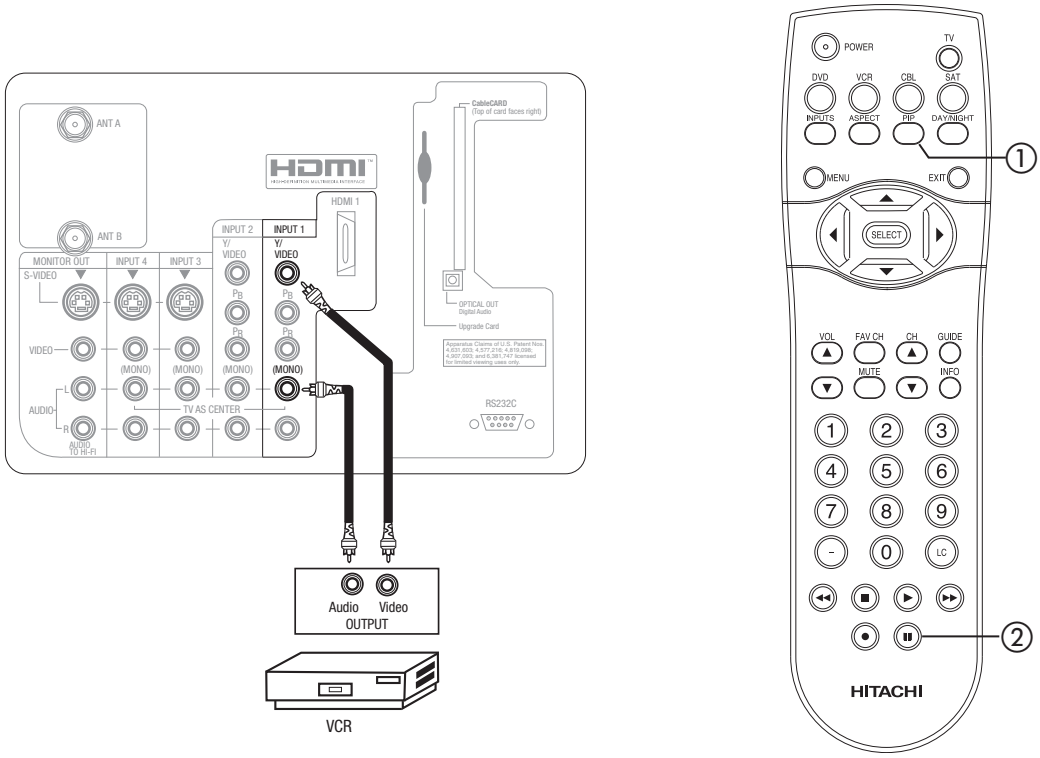
⑯ **LAST CHANNEL (LC) button**
Press this button to toggle between the current and last channel viewed.

⑰ **RECORD button**
Press twice (2 times) to record programs when the remote is in VCR mode.

Your HITACHI Projection TV incorporates Two Tuner technology designed for improved viewing enjoyment. This Two Tuner feature allows you to view antenna inputs on both the main picture and sub-picture simultaneously, with separate tuning control for each.

ANT A input can be viewed as both the main picture and the sub-picture simultaneously. ANT B can only be viewed as a main picture. To select between main picture and PIP sub-picture tuning, use the CURSOR buttons on the remote. The white highlighted channel display will move with every press of the CURSOR buttons (◄, ►).

The Picture-in-Picture feature is convenient when you want to watch more than one program at the same time. You can watch a TV program while viewing other programs from any of the video inputs.

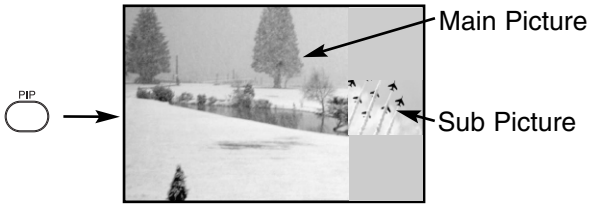



Use above connection to view VCR program as a sub-picture while viewing another program as main picture (ANT A, ANT B, INPUT:2, INPUT:3, INPUT:4, or INPUT:5). You may also view the VCR program as a main picture while viewing another program as a sub-picture (ANT A, INPUT:2, INPUT:3, INPUT:4 or INPUT:5).

When installing a CableCARD, connect your coaxial cable to ANT A (see page 11). ANT B will not be available while using a CableCARD.

① **PIP button**
Press the PIP button and a sub-picture will appear in one of the four different modes (POP, PIP, SPLIT or SURF), depending on the INPUT signal. To change the PIP mode, use the PIP button to cycle through the four different modes.

**POP MODE PICTURE-IN-PICTURE**
POP Mode PIP displays the sub-picture outside of the main picture. Use the CURSOR buttons (▲, ▼) to move the sub-picture. This feature is not available with a 1080i signal. Please refer to the PICTURE-IN-PICTURE MODES Table (see page 27).

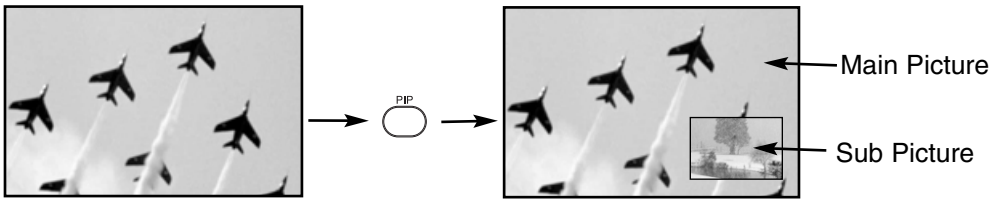



**NOTES:** 1. PIP MODE Picture-in-Picture is only available with a 1080i signal.
2. Press the CURSOR buttons (◄, ►) to enable the sub-picture sound.
3. Sub-picture channel availability depends on the channel list.

# PICTURE-IN-PICTURE (PIP)

**PIP MODE PICTURE-IN-PICTURE**

This feature is only available with a 1080i signal. To prevent a pattern burn, occasionally move the sub-picture using the CURSOR buttons.




**SPLIT MODE PICTURE-IN-PICTURE**

Split Mode PIP displays the main picture and sub-picture evenly on the screen.

**SURF MODE PICTURE-IN-PICTURE**

Surf Mode PIP automatically scans all active channels (those set in memory) and displays them as PIP sub-pictures or Thumbnail channels. Press the SELECT button to stop on a chosen channel. Use the remote CURSOR buttons (◄, ►, ▲, ▼) to navigate the Thumbnail. Press the EXIT button to enable your chosen channel and return to normal viewing.

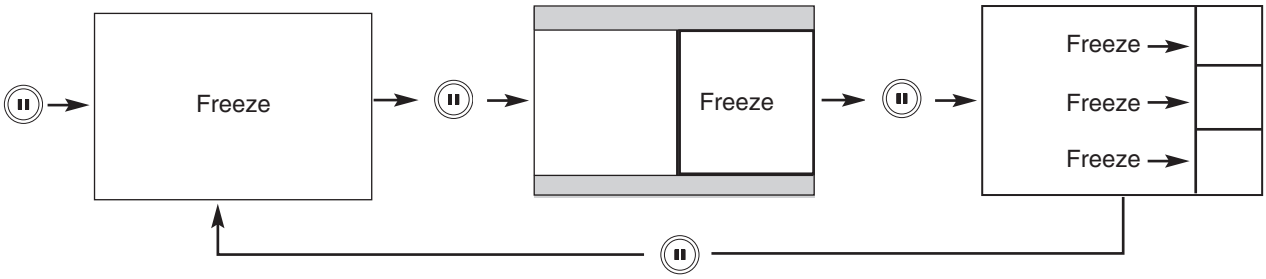
**NOTE:** Press the SELECT button to stop the Surf mode or channel scan. Press the SELECT button again to resume Surf mode or channel scan.

PICTURE-IN-PICTURE (PIP) MODES

| PIP Mode | Main \ Sub | NTSC | 480i | 480p | 720p | 1080i |
|---|---|---|---|---|---|---|
| POP | NTSC | Yes | Yes | - | - | Yes |
| | 480i | Yes | Yes | - | - | Yes |
| PIP 4x3 | 1080i | Yes | Yes | - | - | - |
| PIP 16x9 | 1080i | Yes | Yes | - | - | Yes |
| SPLIT | NTSC | Yes | Yes | Yes | Yes | Yes |
| | 480i | Yes | Yes | Yes | Yes | Yes |
| | 480p | Yes | Yes | Yes | Yes | Yes |
| | 720p | Yes | Yes | Yes | Yes | Yes |
| | 1080i | Yes | Yes | Yes | Yes | Yes |
| 12 Pix | - | Yes | - | - | - | - |

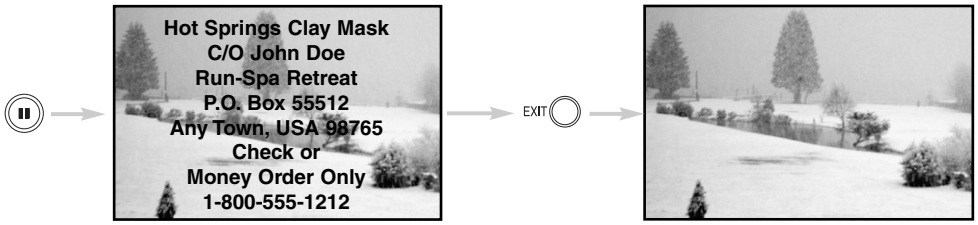
② **PAUSE button**

If you wish to freeze the sub-picture, press the PAUSE button. This is convenient when trying to write down the address for a mail order company, recording statistics for a sporting event, etc. To return the picture to motion, press the EXIT button. Press the PAUSE button repeatedly to toggle between FREEZE modes (Main Freeze, SPLIT and STROBE).



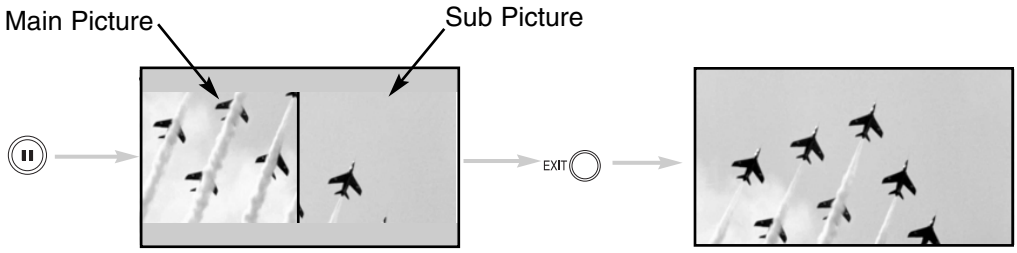

**MAIN FREEZE**

Press the PAUSE button to freeze one frame of the picture you are currently viewing and the frozen frame will show in the Main Picture. Press the EXIT button to return to normal viewing. This feature is useful for freezing a picture frame with addresses.



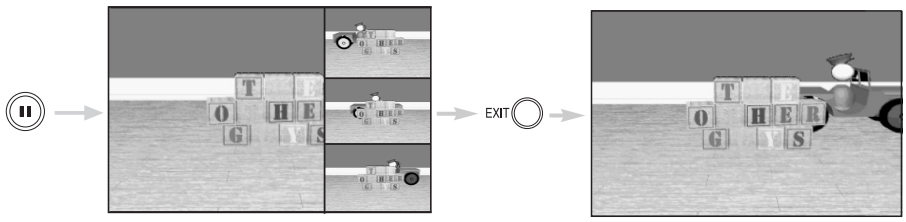

**SPLIT FREEZE**

Press the PAUSE button to freeze the picture you are currently viewing (only the right sub-picture will freeze). Press the EXIT button to return to normal viewing.




**STROBE FREEZE**

Press the PAUSE button to freeze three frames of the picture you are currently viewing (only the 3 sub-pictures will freeze). Press the EXIT button to return to normal viewing. This feature is useful for viewing a moving picture that has many details, for example, a close play in a sporting event or a golf swing.



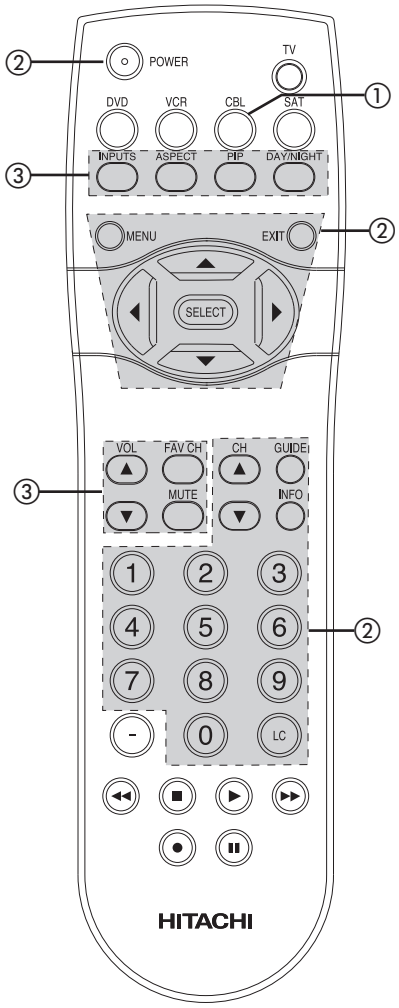

**NOTES:** 1. The default FREEZE mode is the MAIN freeze followed by the SPLIT freeze and then the STROBE freeze. The last Freeze mode you selected before you pressed the EXIT button will be the one that comes up after pressing the PAUSE button again.
2. Each freeze frame is delayed about 0.1 (1/10) second.
3. Strobe Freeze is not available in 480p/720p/1080i inputs.

# USING THE REMOTE TO CONTROL CABLE BOX FUNCTIONS

**Operating the precoded function for your cable box.**

This remote is designed to operate different types of cable boxes. You must first program the remote to match the remote system of your cable box (refer below for pre-codes).

1. Turn ON your cable box.
2. Aim the remote control at the front of your cable box.
3. To switch to Cable (CBL) pre-coded mode, press and release the CABLE (CBL) button.
4. Hold down the CBL button on the remote and enter the two digit preset code that matches your cable box, as shown below. Release the CBL button.
5. Aim the remote at the cable box and press the POWER button. The remote will turn off your cable box when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your cable box. If the cable box does not turn off, try a different two digit preset code.
6. The remote will now control your Cable box.




**NOTES:**
1. If your cable box cannot be operated after performing the above procedures, your cable box code has not been precoded into the remote.
2. In the unlikely event that your cable box cannot be operated after performing the above procedures, please consult your cable box operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.

① **CABLE (CBL) button**
This button allows the remote to control your cable box by setting it to CABLE mode.

② **PRECODED CABLE BOX buttons**
These buttons transmit the chosen precoded cable codes.

③ **EXCLUSIVE TV buttons**
These buttons are for operating the TV.

| CABLE BRAND | CODES |
|---|---|
| HAMLIN | 22, 23, 24, 25 |
| JERROLD | 00, 01, 02, 03, 04, 05, 06, 07 |
| OAK | 26, 27, 28 |
| PANASONIC | 18, 19, 20 |
| PIONEER | 13, 14 |
| SCIENTIFIC ATLANTA | 08, 09, 10 |
| TOCOM | 15, 16 |
| ZENITH | 11, 12 |

**MY CABLE BOX CODE IS:_____**

**NOTE:** Refer to instruction manual of the Cable Box for operation of the buttons exclusively for the Cable Box.

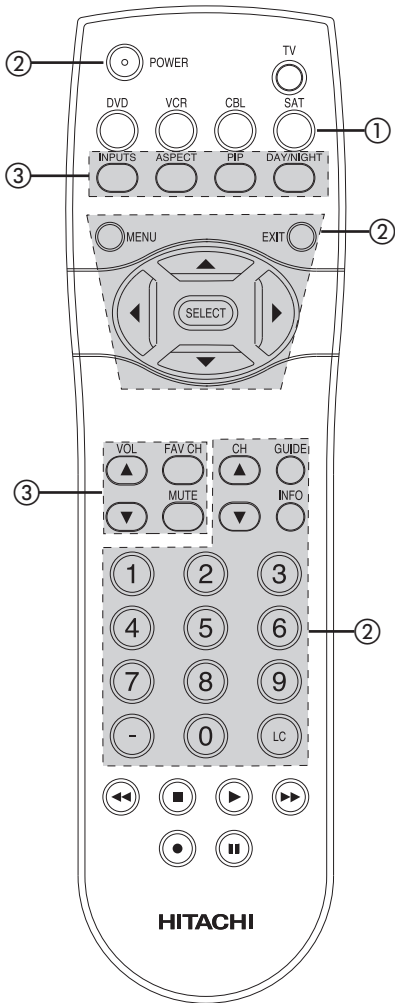
# USING THE REMOTE TO CONTROL SET-TOP-BOX/SATELLITE RECEIVER FUNCTIONS



**Operating the precoded function for your set-top-box/satellite receiver.**

This remote is designed to operate different types of set-top-box/satellite systems. You must first program the remote to match the remote system of your set-top-box/satellite systems (refer below for pre-codes).

1. Turn ON your set-top-box/satellite systems.
2. Aim the remote control at the front of your set-top-box/satellite systems.
3. To switch to set-top-box/satellite (STB) pre-coded mode, press and release the SAT button.
4. Hold down the SAT button on the remote and enter the two digit preset code that matches your set-top-box/satellite receiver, as shown below. Release the SAT button.
5. Aim the remote at the set-top-box/satellite receiver and press the POWER button. The remote will turn off your set-top-box/satellite receiver when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your set-top-box/satellite receiver. If the set-top-box/satellite receiver does not turn off, try a different two digit preset code.
6. The remote will now control your set-top-box/satellite receiver.




**NOTES:**
1. If your set-top-box/satellite receiver cannot be operated after performing the above procedures, your set-top-box/satellite receiver code has not been precoded into the remote.
2. In the unlikely event that your set-top-box/satellite receiver cannot be operated after performing the above procedures, please consult your set-top-box/satellite receiver operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.

① **SAT (Set-Top-Box/Satellite) button**
This button allows the remote to control your set-top-box/satellite receiver by setting it to SET-TOP-BOX/SATELLITE mode.

② **PRE-CODED SET-TOP-BOX/SATELLITE RECEIVER buttons**
These buttons transmit the chosen pre-coded set-top-box/satellite codes.

③ **EXCLUSIVE TV buttons**
These buttons are for operating the TV.

| SATELLITE BRAND . . . . . .CODES | SET TOP BOX BRAND . . . . . .CODES |
|---|---|
| ECOSTAR . . . . . .03 | PANASONIC . . . . . .05 |
| HITACHI . . . . . 00 | RCA . . . . . 06 |
| HUGHES . . . . . .04 | SAMSUNG . . . . . .07 |
| RCA . . . . . .01 | ZENITH . . . . . .08 |
| SONY . . . . . .02 | |

**MY SATELLITE RECEIVER/STB CODE IS:_____**

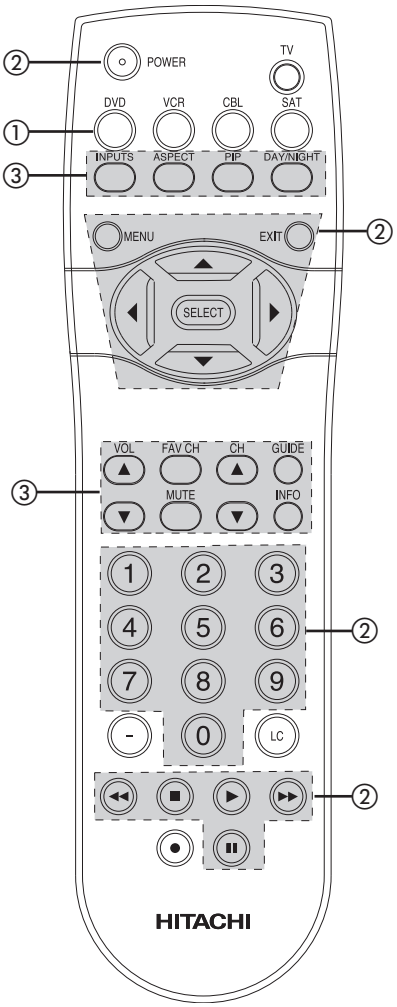
**NOTE:** Refer to instruction manual of the set-top-box/satellite receiver for operation of the buttons exclusively for the set-top-box/satellite receiver.

# USING THE REMOTE TO CONTROL DVD FUNCTIONS

**Operating the precoded function for your DVD player.**

This remote is designed to operate different types of DVD players. You must first program the remote to match the remote system of your DVD player (refer below for pre-codes).

1. Turn ON your DVD player.
2. Aim the remote control at the front of your DVD player.
3. To switch to DVD pre-coded mode, press and release the DVD button.
4. Hold down the DVD button on the remote and enter the two digit preset code that matches your DVD player, as shown below. Release the DVD button.
5. Aim the remote at the DVD player and press the POWER button. The remote will turn off your DVD player when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your DVD player. If the DVD player does not turn off, try a different two digit preset code.
6. The remote will now control your DVD player.
7. You will need to set the display type of your DVD player to 16:9 widescreen.




**NOTES:**
1. If your DVD player cannot be operated after performing the above procedures, your DVD player's code has not been precoded into the remote.
2. In the unlikely event that your DVD player cannot be operated after performing the above procedures, please consult your DVD player operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.

① **DVD button**
This button allows the remote to control your DVD player by setting it to DVD mode.

② **PRECODED DVD Buttons**
These buttons transmit the chosen precoded DVD codes.

③ **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.

| DVD BRAND | CODES |
|---|---|
| APEX | 10 |
| GO VIDEO | 09 |
| HITACHI | 00 |
| KENWOOD | 11 |
| PANASONIC | 02 |
| PIONEER | 03 |
| RCA | 04 |
| SAMSUNG | 06 |
| SANYO | 07 |
| SONY | 01 |
| TOSHIBA | 05 |

**MY DVD PLAYER CODE IS:_____**

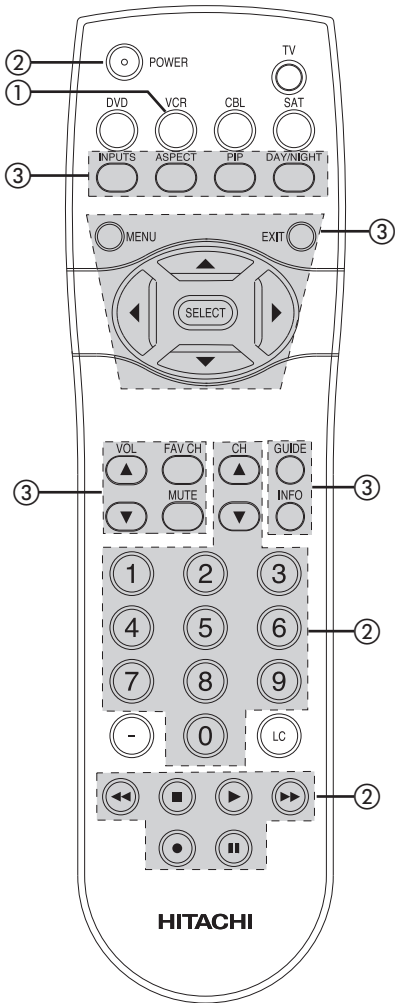
**NOTE:** Refer to instruction manual of the DVD player for operation of the buttons exclusively for the DVD player.

# USING YOUR REMOTE TO CONTROL VCR FUNCTIONS

**Operating the precoded function for your VCR.**

This remote is designed to operate different types of VCRs. You must first program the remote to match the remote system of your VCR (refer below for pre-codes).

1. Turn ON your VCR.
2. Aim the remote control at the front of your VCR.
3. To switch to VCR pre-coded mode, press and release the VCR button.
4. Hold down the VCR button on the remote and enter the two digit preset code that matches your VCR, as shown below. Release the VCR button.
5. Aim the remote at the VCR and press the POWER button. The remote will turn off your VCR when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your VCR. If the VCR does not turn off, try a different two digit preset code.
6. The remote will now control your VCR.




**NOTES:**
1. If your VCR cannot be operated after performing the above procedures, your VCR's code has not been precoded into the remote.
2. In the unlikely event that your VCR cannot be operated after performing the above procedures, please consult your VCR operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. Press the Record button twice to record.

① **VCR button**
This button allows the remote to control your VCR player by setting it to VCR mode.

② **PRECODED VCR Buttons**
These buttons transmit the chosen precoded VCR codes.

③ **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.

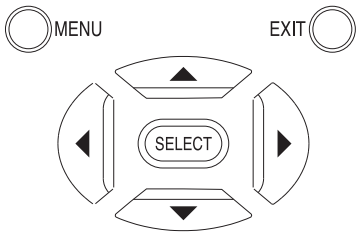
| VCR BRAND | CODES |
|---|---|
| EMERSON | 20, 21, 22, 23 ,24 |
| FISHER | 34, 37, 38, 39 |
| HITACHI | 00, 01, 02, 03, 04, 05, 06 |
| JVC | 49, 50, 51 |
| MAGNAVOX | 12, 13 |
| MITSUBISHI | 27, 28, 29, 30 |
| NEC | 40, 41 |
| PANASONIC | 10, 11 |
| SAMSUNG | 25, 26 |
| SHARP | 31, 32 |
| SONY | 07, 08, 09 |

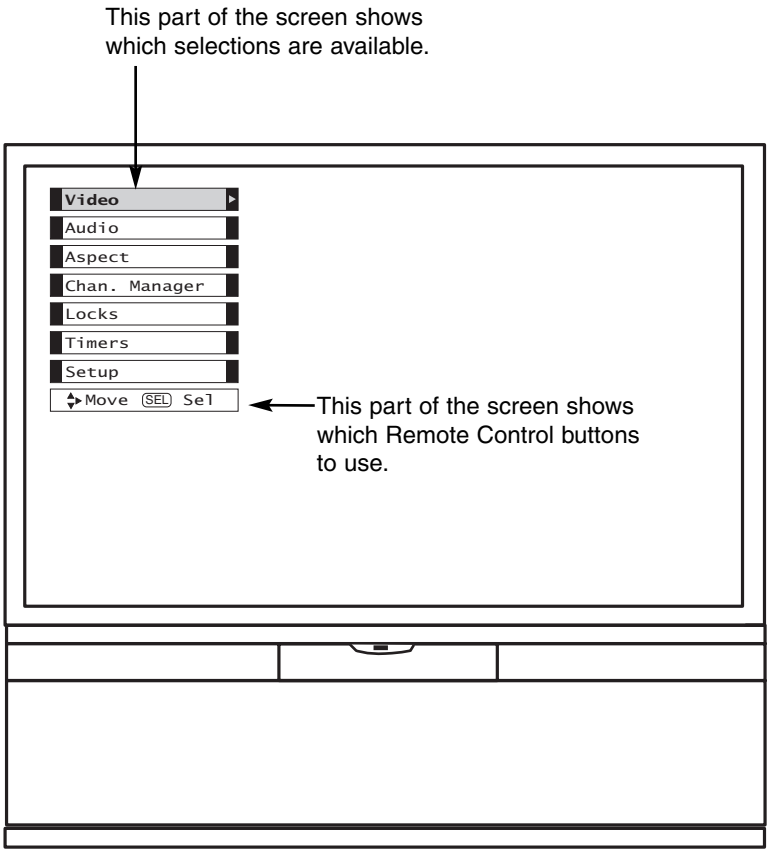
**MY VCR CODE IS: _____**

**NOTE:** Refer to instruction manual of the VCR for operation of the buttons exclusively for the VCR.

# ON-SCREEN DISPLAY (OSD)

1. Press MENU on the remote control to display the different features on your HITACHI Projection TV.
2. Press the CURSOR buttons to navigate and highlight a different feature of the On-Screen Display menu. Press the SELECT button to select.
3. Press EXIT on the remote control to quickly exit from a menu.



**Video**

| | |
|---|---|
| Picture Mode | Select between the two picture modes; Day and Night. |
| Contrast | Adjust contrast. |
| Brightness | Adjust brightness. |
| Color | Adjust color. |
| Tint | Adjust tint. |
| Sharpness | Adjust sharpness. |
| Color Temperature | Set this to High for less intense color with more blue, set to Medium for natural color, set to Standard for standard colors or Black and White for more reddish color. |
| Black Enhancement | Enhance picture brightness in light scenes. |
| Edge Enhancement | Automatically enhances the edges between light and dark areas. |
| Reset Video Settings | Choose the Reset Video settings. |
| Color Management | Adjust and balance individual colors to make either deeper or more pure according to preference. |
| Color Decoding | Adjust the percentage of Red, Green and Color according to preference. |
| Auto Color | The AUTO COLOR function automatically monitors and adjusts the color to maintain natural flesh tones while preserving fidelity of background colors. |
| Noise Reduction | Reduces conspicuous noise in the picture. |
| Auto Movie Mode | Turn ON/OFF the 3:2 Pulldown detection feature. |

**Audio**

| | |
|---|---|
| Treble | Adjust the treble. |
| Bass | Adjust the bass. |
| Balance | Adjust the balance. |
| SRS | Select SRS settings (Off, Wide, Normal) |
| BBE | Select BBE settings (Off, Soft, Hard) |
| Audio Source | Select between three Audio Sources. |
| Internal Speakers | Select internal or external speakers. |
| Auto Noise Cancel | Eliminates the noise between stations. |
| Perfect Volume | Adjust volume in fixed setting. |
| Loudness | Adjust Loudness. |
| Language | Select Language options if available. |
| Digital Output | Select Optical Output options. |
| DRC | Select Dynamic Range Compression to ON or OFF. |

**Aspect**

| | |
|---|---|
| 4:3 Standard | Choose the picture format aspect ratio. |
| 4:3 Expanded | |
| 4:3 Zoom 1 | |
| 4:3 Zoom 2 | |
| 16:9 Standard | |
| 16:9 Zoom | |

**NOTE:** The Language, Digital Output, and the Dynamic Range Compression feature of the Audio OSD are only available for Digital channels.

# ON-SCREEN DISPLAY (OSD)

| | | |
|---|---|---|
| Channel Manager | Set the Antenna | Set Antenna settings. |
| | Auto Channel Scan | Set Auto Channel Scan. |
| | Signal Meter | Access Signal Meter. |
| | Channel List | Set Channel List. |
| Locks | Change Access Code | Change Lock access code. |
| | Engage Lock | Choose to lock channel, video input, and/or front panel. |
| | TV Time Lock | Set specific time to Lock TV. |
| | Movie Ratings | Block various types of movies and video types based on motion picture ratings. |
| | TV Ratings | Block various types of movies and television programming based on a parental guide ratings. |
| | Canadian Ratings (ENG) | Block various types of movies and television programming based on the Canadian ratings system. |
| | Canadian Ratings (FRN) | Block various types of movies and television programming based on the Canadian French ratings system. |
| Timers | Set the Clock | Set Clock Settings. |
| | Set Sleep Timer | Set Sleep Timer intervals (30 min. intervals, 00:30-3:00). |
| | Set Day/Night Timer | Set Day/Night picture mode settings. |
| | Set Event Timer | Set viewing reservation for TV programs. |
| Setup | Magic Focus Tune Up | Automatic and manual alignment of the red, green and blue colors to make white. |
| | Menu Preference | Choose English, French, or Spanish text. |
| | Set The Inputs | Label Video Inputs , VCR, DVD, etc. |
| | Set Virtual HD | Select between 1080i and 540p Scan mode. |
| | Set Black Side Panel | Set the gray side bars on/off when watching 4:3 signals in standard mode. |
| | Set Closed Captions | Feature to display dialogue/text. |
| | Set Monitor Out | Set Monitor Out source. |
| | About Your TV | Information display for this TV. |
| | CableCARD Info | Select to access CableCARD information. |
| | Set AV Control | Select to set RS232C feature. |
| | Upgrades | Select to upgrade TV software. |
| | Quick Start Up | Select the TV Quick Start Up options. |

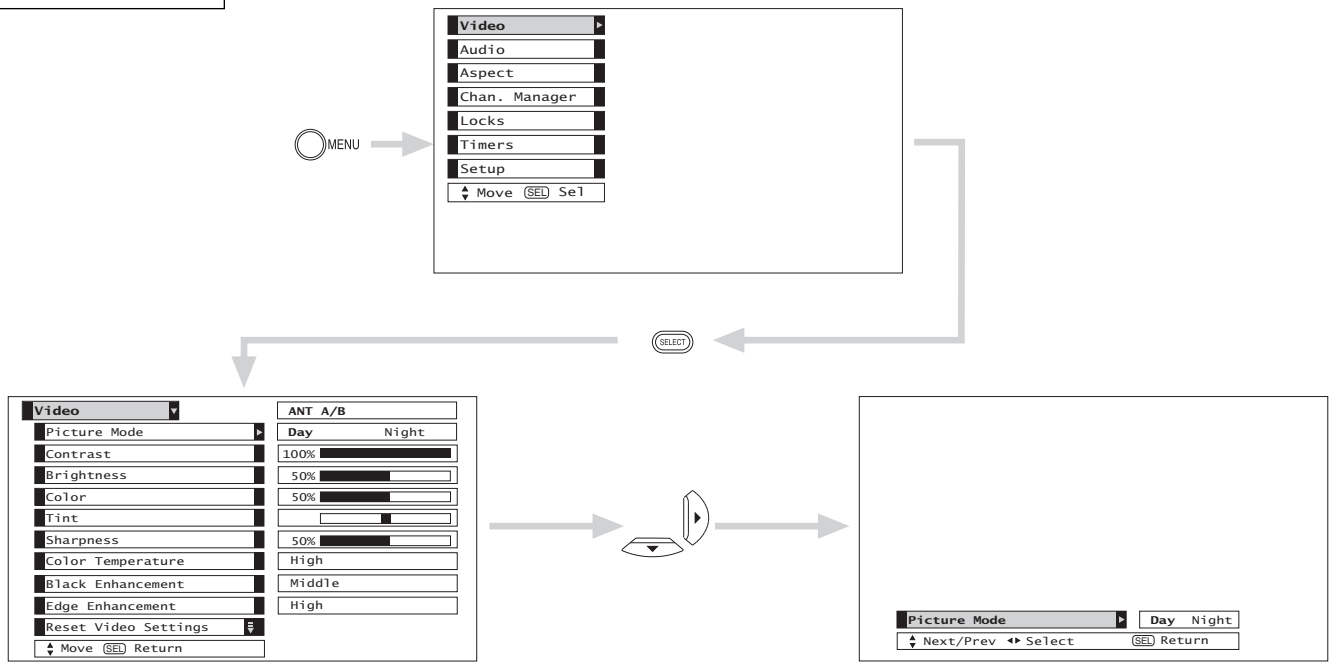
**NOTES:**
1. The Signal Meter feature of the Channel Manager OSD is only available for Digital signals.
2. The CableCARD information feature of the Setup OSD is only available when a CableCARD from your cable operator is installed in the rear panel of the TV.

## Video

Select VIDEO to adjust picture settings and improve picture quality. You can independently customize each of the Video Inputs to your preference to increase viewing performance and pleasure depending upon the video program being viewed. If RESET is selected, only the selected input will reset to initial conditions.

### Picture Mode

Use this function to choose from automatic picture settings to optimize your TV's performance.




Use the CURSOR buttons ◀ or ▶ to highlight and select Picture Mode settings.

| Function | Day | Night | Reset |
|---|---|---|---|
| Contrast | 100% | 70% | Reset the video menu settings on current input automatically to Day Mode. |
| Brightness | 50% | 55% | |
| Color | 50% | 50% | |
| Tint | 50% | 50% | |
| Sharpness | 50% | 40% | |
| Color Temperature | High | Standard | |
| Black Enhancement | Middle | Low | |
| Edge Enhancement | High | Low | |
| Auto Color | Off | Off | |
| Noise Reduction | Off | Off | |
| Color Management (Set User Colors) | Off | Off | |
| Auto Movie Mode (TV/Cinema Detection) | Off | Off | |

Press EXIT to quit menu or select PICTURE MODE to return to previous menu.

# VIDEO

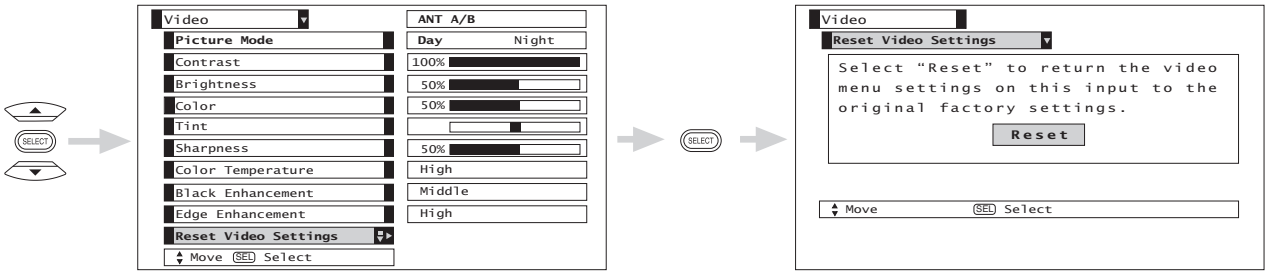
Use the CURSOR buttons ▲ or ▼ to highlight the function to be adjusted.
Press the CURSOR buttons ◄ or ► to adjust the function. Press the SELECT button to select the function settings.
Press MENU to return to main menu or select PICTURE MODE to return to previous menu.
Press EXIT to quit menu.

| | |
|---|---|
| **Contrast** | Use this function to change the contrast between black and white levels in the picture. |
| **Brightness** | Use this function to adjust overall picture brightness. |
| **Color** | Use this function to adjust the level of color in the picture. |
| **Tint** | Use this function to adjust flesh tones so they appear natural. |
| **Sharpness** | Use this function to adjust the amount of fine detail in the picture. Sharpness function will be disabled when Noise Reduction is set to High. |
| **Color Temperature** | Set this to High for cooler color with more blue, set to Medium for more natural color, set to Standard for accurate color or set to Black/White for more reddish color. |
| **Black Enhancement** | Use this function to enhance Picture brightness in light scenes using the settings off, low, middle and high. |
| **Edge Enhancement** | Use this function to automatically enhance the edges between light and dark areas using the settings Off, Low, Middle and High. |

**NOTES:**
1. If CONTRAST is selected, you are adjusting CONTRAST. The additional menu items BRIGHTNESS, COLOR, TINT, and SHARPNESS can be selected and adjusted in the same manner.
2. It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT VIDEO Y-$P_BP_R$ input jacks.
3. ANT A and B share a Video setting. Also, each of the video inputs have their own independent settings.

**Reset Video Settings**

This function allows you to Reset the Video Menu Settings of the present input and return it to the Day VIDEO mode.

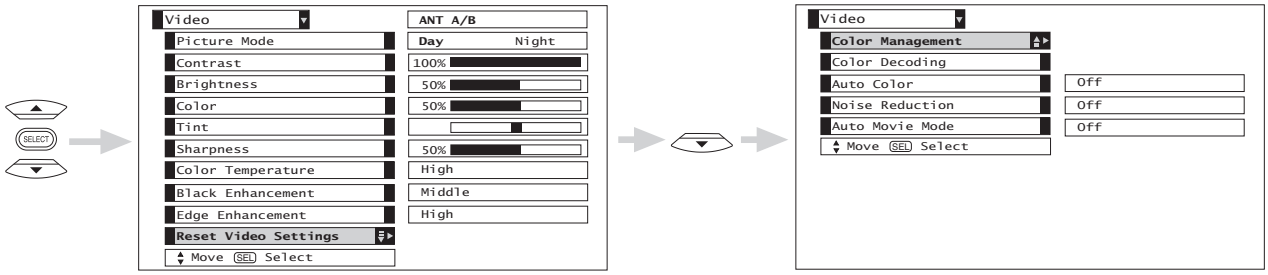



Use the CURSOR buttons to highlight functions.
Press the SELECT button to select Reset Video Settings.

Use the CURSOR button ▼ to access other video settings.

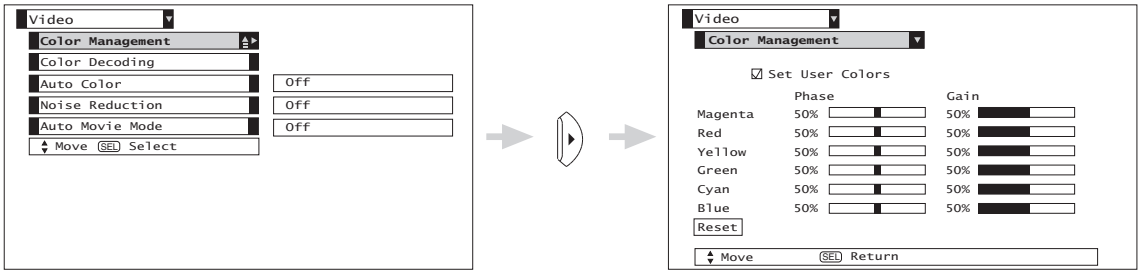
You can customize each of the Video Inputs to your preference to increase viewing performance and pleasure, depending upon the video program being viewed. If RESET is selected, only the selected Input will reset to the initial conditions as explained above.

If RESET is selected in Video:1 Input, only Video:1 Input will return to factory conditions.




**Color Management**

Use this function to adjust and balance the listed individual colors to make them either deeper or more pure depending on the user's preference. Adjust the GAIN settings to make the color brighter (+) or darker (-). Adjust the PHASE settings to make the colors deeper (+) or normal (-) to match real life colors.



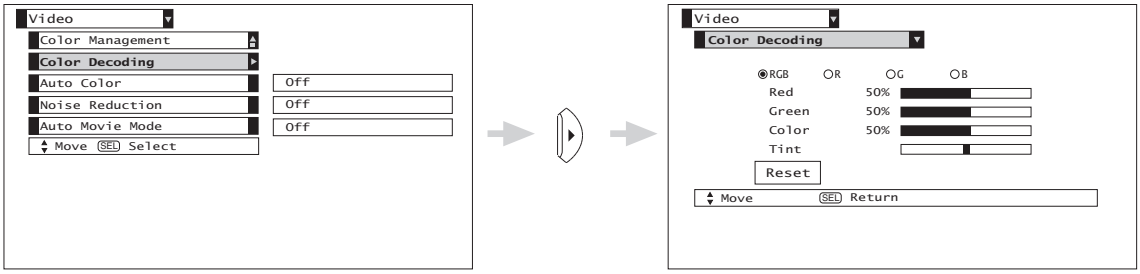

Use the CURSOR buttons to highlight function.
Press the SELECT button to select User Colors setting. When the function has a "√" in the box, it is ON.
Press the CURSOR buttons ◄, ►, ▼, ▲, to highlight and adjust individual colors.
Use the CURSOR buttons to highlight and select "Reset" to return all colors to default settings.

**NOTE:** When the Set User Colors box is not checked , the listed colors will be grayed out.

# VIDEO

**Color Decoding**

Use this function to adjust and balance the percentage of Red, Green and Blue according to the user's preference in each of the four color temperature settings. Use TINT to adjust flesh tones so they appear natural.




Use the CURSOR buttons to highlight function.
Press the SELECT button to select from 4 menu items.
Press the CURSOR buttons ◄, ►, ▼, ▲, to highlight and adjust Red, Green, Color and Tint.
Use the CURSOR buttons to highlight and select "Reset" to return all settings to default.

**NOTE:** Color Decoding settings are independently stored in each of the 4 Color Temperature settings.

**Auto Color**

The AUTO COLOR function automatically monitors and adjusts the color to maintain natural flesh tones while preserving fidelity of background colors.

**NOTES:**
1. When using Component, HDMI or DVI input, Auto Color will not be available (grayed out).
2. When using digital channels, Auto Color will not be available (grayed out).

**Noise Reduction**

The NOISE REDUCTION function automatically reduces conspicuous noise in the picture without degrading picture quality. Set NOISE REDUCTION to OFF if the TV experiences picture blocking. When Noise Reduction is set to High, Sharpness function is disabled (grayed out).

**Auto Movie Mode**

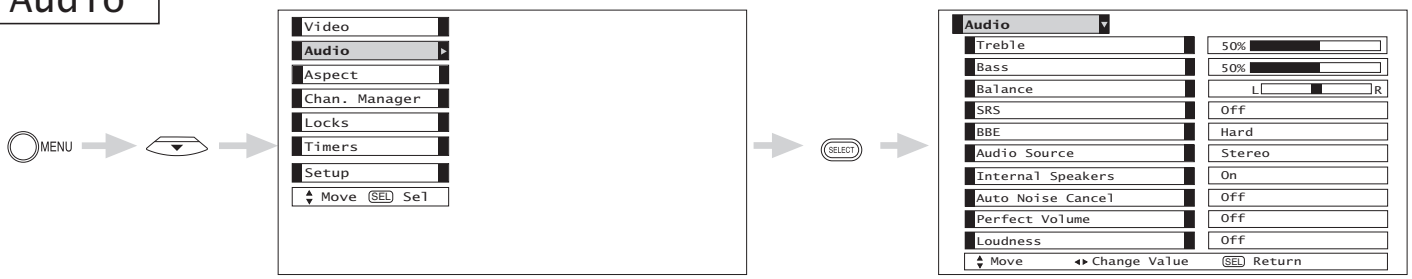
The Auto Movie Mode function turns ON or OFF the 3:2 PULLDOWN DETECTION SPECIAL FEATURE. Theatrical movies are shot on film at 24 frames or still pictures per second, instead of 30 frames or 60 fields like video. When film is transferred to video for television viewing, the disparity between the two frame rates must be reconciled. This involves a process known as 3:2 pulldown.

When Auto Movie Mode is turned ON from the VIDEO menu, your Hitachi Projection Television will activate the circuitry for this special feature to improve video performance when watching film based sources.

**NOTES:**
1. When using Progressive Scan Component, HDMI or DVI input (Ex. 480p, 720p, 1080i), Auto Movie Mode will not be available (grayed out).
2. All Video settings are independent of each other based on it's input (ANT A/B, Input 1~5, Photo Input).

Audio

Select AUDIO to adjust the TV to your preference and to improve the sound quality.




Press the CURSOR buttons ▲, ▼, to select menu item.
Press the CURSOR buttons ◄ or ► to adjust the function.
Press the EXIT to quit the MENU, or select Audio to return to the main menu.

**NOTE:** If TREBLE is selected you are adjusting treble. The additional menu items Bass and Balance can be selected and adjusted in the same manner.

**Treble** This function controls the high frequency audio to all speakers.

**Bass** This function controls the low frequency audio to all speakers.

**Balance** This function will control the left to right balance of the Projection TV internal speakers.

**SRS**

SRS

Based on the principles of the human hearing system, SRS technology delivers and exciting and realistic 3D Sound experience from just two external speakers (or) the two internal speakers of your HITACHI Television. If your HITACHI Television is connected to an external audio system, SRS will also create an incredible 3D sound experience from two speakers and even enhance a complete multi-speaker surround sound system.

**NOTES:** *SRS and the (●) symbol are trademarks of SRS Labs, Inc. SRS technology is incorporated under license from SRS Labs, Inc.

**BBE**

**BBE Technology**

Sound reproduction quality enhancement system. The BBE technology produces sound that is natural and crisp from just two speakers or the two internal speakers found in your HITACHI television. If your HITACHI television is connected to an external audio system, BBE will also create an incredible crisp sound experience from two speakers. BBE brings to the listener's ear a more complete and accurate reproduction of the original performance. Each voice, speaking or singing, each instrument or sound effect is presented with its attendant harmonics or partials more clearly audible. The ear can then more easily recognize the unique tonal colors of each sound as though the sound was being produced live.

**NOTES:** Licensed by BBE Sound, Inc. under USP5510752 and 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc. Manufactured under license from BBE Sound, Inc.

# AUDIO

**Audio Source**

Multi-Channel Television Sound will allow you to select STEREO (a stereo broadcast), MONO (monaural sound) used when receiving a weak stereo broadcast or 2nd Audio Prog (SAP) which may be a secondary language, weather report, etc.
The sources received will be displayed at the top right edge of the TV. The source you select will be displayed above the sources received. See example below for each selection when both stereo and second audio are received (monaural is always received).

**STEREO SELECTED**

**SAP SELECTED**

**MONO SELECTED**

**Internal Speakers**

This function is useful when setting up the external speakers.
ON - Select this feature if using the internal speakers only.
TV as Center - Select this feature when setting up external speakers from a separate stereo system. The TV's speakers will work as the center speaker.
OFF - Select this feature if you prefer to use only speakers from a separate stereo system.

**Auto Noise Cancel**

This function eliminates the noise between stations. If a channel is tuned and is noisy, this function will automatically eliminate the audio for that channel.

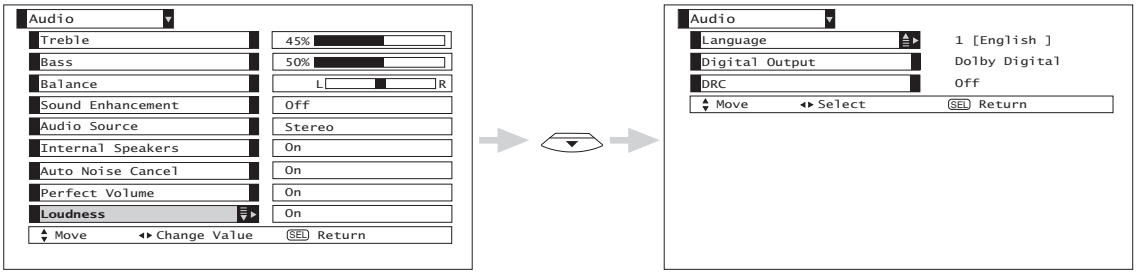
**Perfect Volume**

This function will automatically adjust volume so each channel and input has the same average volume level.

**Loudness**

This function turns loudness ON or OFF. It will improve the quality of both low and high frequency sounds when listening at low volume levels.

Use the functions below if your TV is connected to an amplifier/receiver with optical digital input with Dolby Digital or PCM decoder capabilities.




**Language** Some programs transmit more than one DTV language option. Most will have English as a default language. The language function will allow you to select up to 4 language options (if available).

**Digital Output** This function allows you to select between Dolby® Digital and PCM.

Dolby® Digital - Select this feature if the TV is connected to an amplifier/receiver with a Dolby® Digital only decoder; it will provide six independent soundtrack channels through the optical output jack (Digital Audio).

PCM - Select this feature if the TV is connected to an amplifier/receiver with a PCM only decoder; it will provide two independent soundtrack channels through the optical output jack (Digital Audio).

*Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

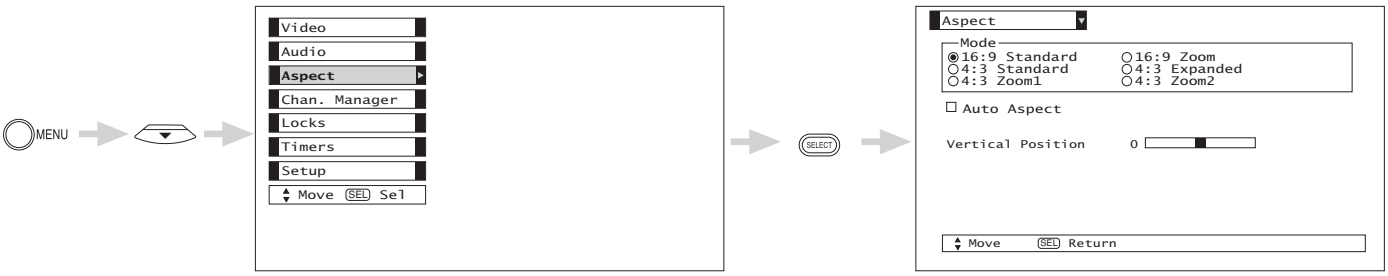
**DRC** Dynamic Range Compression - Use this function to compress the range of sound volume. By compressing the range of sound volume, it is possible not only to suppress the output of loud sound at night but also to raise the volume of low sound. This is only effective when the TV is connected via the optical out (digital audio) to an amplifier/receiver with a Dolby® Digital decoder. The default setting is ON.
Use the CURSOR buttons ◄, ► to select the chosen options.

**NOTE:** These functions are only available when viewing digital programs.

# ASPECT

Aspect

Use this function to select the Picture Format Aspect Ratio.




**Auto Aspect**
Automatically adjust the Aspect Ratio depending on the input signal to fill the screen.

Press THE CURSOR buttons ▲, ▼, ◀, ▶ to select menu item.
Press THE SELECT button to select. A "√" in the box indicates that the feature is ON.

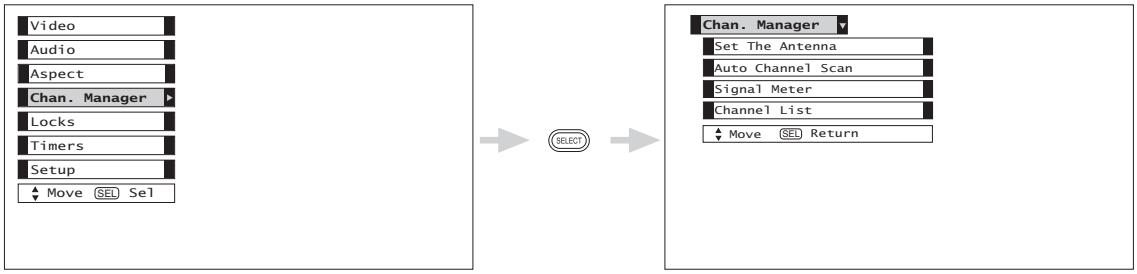
**NOTES:**
1. The Auto Aspect function is recommended on an input signal with VIDEO ID.
2. The Auto Aspect function is best used on composite video, S-Video, and 480i component signals.
3. See page 22 for Aspect Mode availability.

**Vertical Position**
This function allows you to select when aspect style is either 4:3 EXPANDED/ZOOM1/ZOOM2 or 16:9 ZOOM. Vertical position can be changed with these modes. For example, it will be useful for centering the picture area at both the top and bottom of the picture with 480i/480P signal. Adjustable range is -10 (video center is toward bottom of screen) to +10 (video center is toward top of screen).

Press the CURSOR buttons ▲, ▼, to select menu item.
Press the CURSOR buttons ◀ or ▶ to adjust the function.
Press EXIT to quit the MENU, or press the Aspect button to return to the main menu.

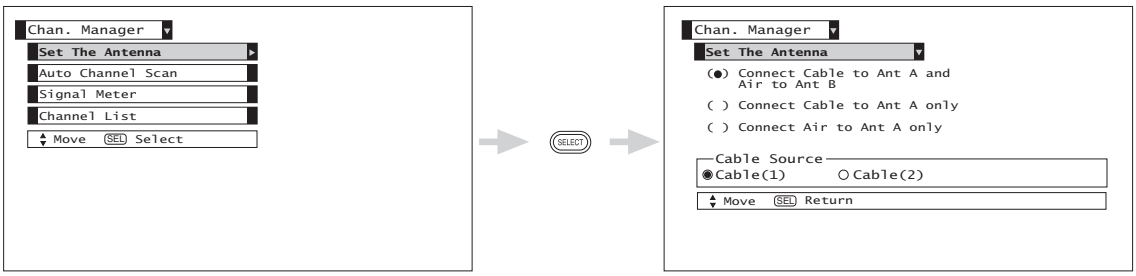
**NOTE:** Vertical Position will not be available in 4:3 Standard and 16:9 Standard modes.

**Chan. Manager** Select Channel Manager to set your Antenna options, run Auto Channel Scan, Check Signal Meter and Set Channel List.




Press the CURSOR buttons ▲, ▼ to highlight function, the press the SELECT button to select.

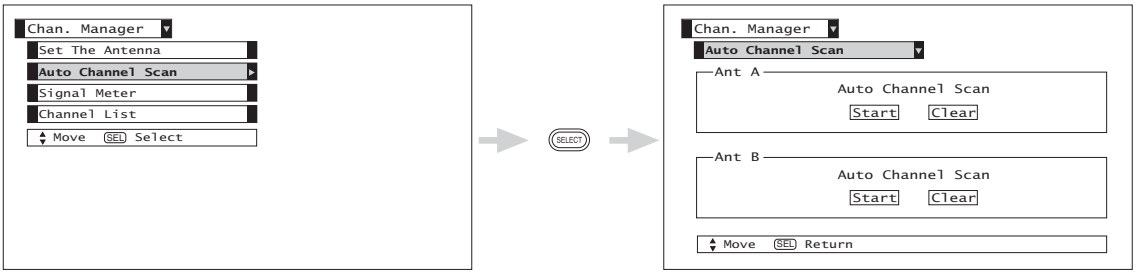
**Set The Antenna** This feature will select Antenna options.




Press the CURSOR buttons ▲, ▼ to highlight function, the press the SELECT button to select.

**NOTE:** When a CableCARD is installed, antenna settings will be set automatically to “Connect Cable to Ant A only”.

**Auto Channel Scan** This feature will automatically store active TV channels in Auto Channel Scan memory.



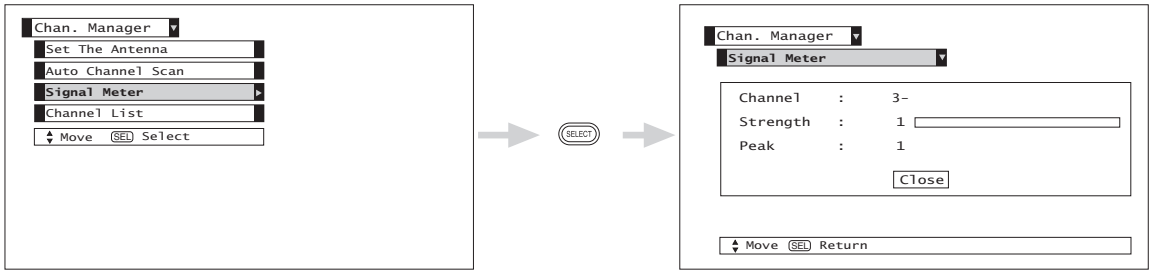

Press the CURSOR buttons ▲, ▼, ◄, ► to highlight Ant A or Ant B.
Press the CURSOR buttons ◄, ► to highlight the Start or Clear option.
Press the SELECT button to select.

**NOTE:** When a CableCARD is installed, Auto Channel Scan will not be available.

# CHANNEL MANAGER

**Signal Meter**

Select Signal Meter when using an indoor or outdoor antenna. This feature will show the signal strength and peak values of the Antenna signal to help you adjust your antenna to optimize signal reception.

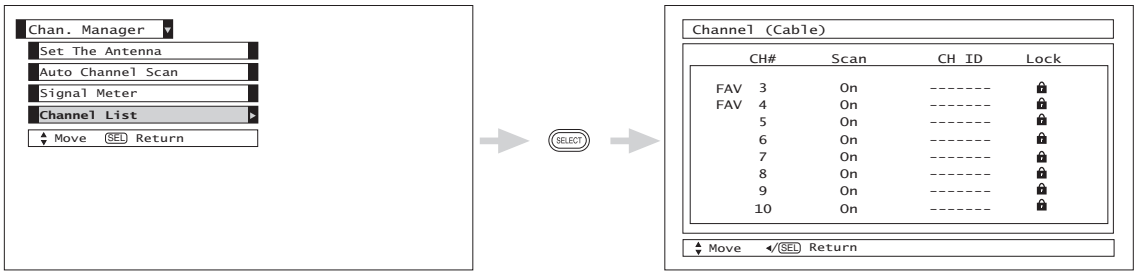



Use the CURSOR buttons and the SELECT button to highlight and select “close” to exit.

**NOTE:** The Signal Meter will not be available (grayed out) when watching analog channels.

**Channel List**

This function allows you to review which channels are labeled (CH ID), which have been added to Channel Memory (SCAN), which are protected by LOCK and which are your Favorite (FAV) Channels.



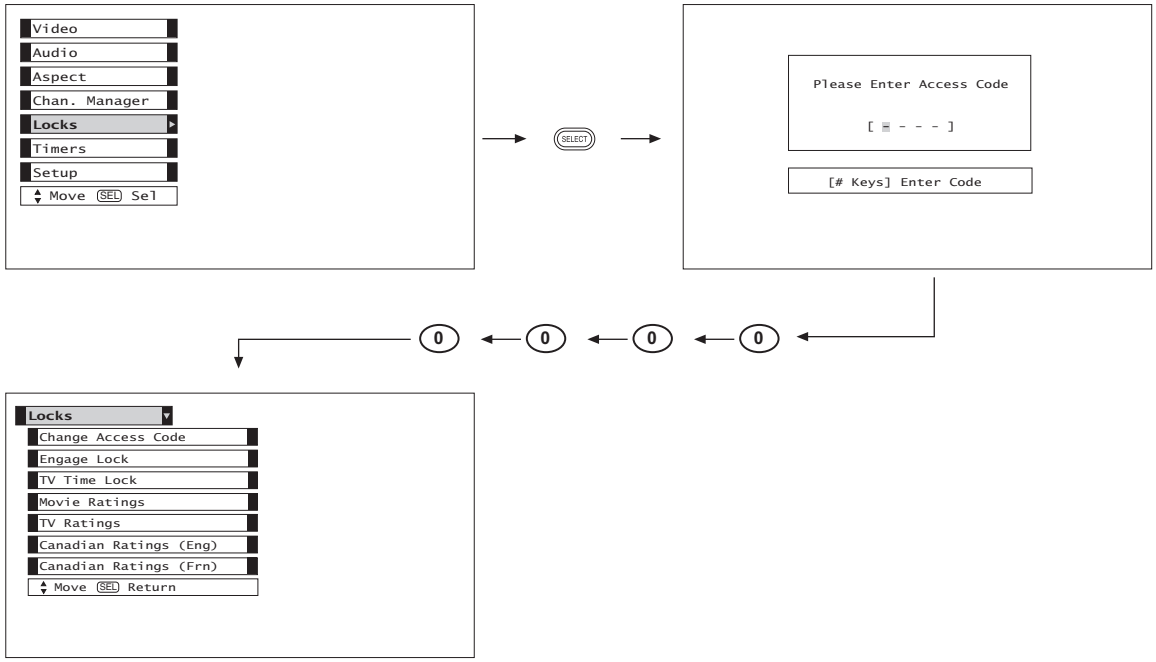

Use the CURSOR buttons to navigate the Channel List.
Press the CURSOR buttons (▲, ▼) to select On or Off on the Scan column.
Press the EXIT button to return to normal viewing.

**NOTE:** When a CableCARD is installed, the Channel List will be dependent on channels agreed upon by you and your cable operator.

## Locks

This function will block out the picture and sound of the selected channel or video input.
It can also be used to keep the TV from being viewed for a scheduled time period that you set.

The code to enter the Locks feature is a four digit access code number. The factory preset code is 0000.
Use the number buttons to enter the access code.




Use the CURSOR buttons ▲ or ▼ to highlight function and then press the SELECT button.
To change the access code number, select Change Access Code. Enter a new four digit number.

Select CHANGE ACCESS CODE to change the factory preset code (0000) to your preference.

When ENGAGE LOCK is selected, SET CHANNEL LOCK, SET INPUT LOCK, and SET FRONT PANEL LOCK can be set individually.

When SET CHANNEL LOCK is turned on, the picture and sound for the chosen channel will be blocked out.

When SET INPUT LOCK is turned on, the picture and sound for all video inputs and the picture and sound for channels 3, 4 will be blocked out.

When FRONT PANEL LOCK is turned on, all buttons on the Front Panel will be deactivated, except the Power button.

When TV TIME LOCK is turned on (☑ TIME LOCK) you can set the BEGIN and END times (CURSOR button ▶) and the TV cannot be viewed during that time period (Set clock first). Use CURSOR buttons ▲ or ▼ to highlight ONCE (TV will time out one time only), DAILY (TV will time out every day), WEEKLY (TV will time out one time a week).

When MOVIE RATINGS is selected, you can block various types of movies and video tapes based on motion picture ratings. Picture-in-Picture will also be blocked automatically (see page 47).

When TV RATINGS is selected, various types of television programming based on a parental guide ratings will be blocked. Picture-in-Picture will also be blocked automatically (see page 48).

Use CANADIAN RATINGS to block various types of movies and television programs based on the two rating systems used in Canada that you feel may be inappropriate due to its content (see pages 49-50).

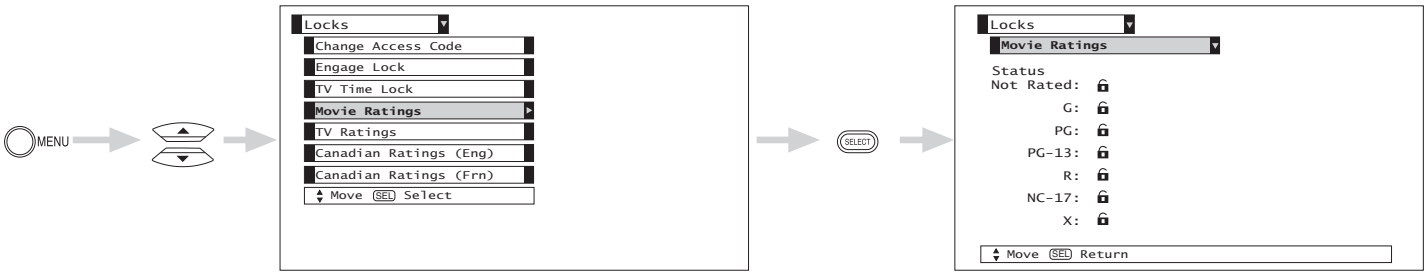
If you forget your access code, use the factory code 7777 to erase your key number. This will reset the access code number back to the factory preset 0000.
Press EXIT to quit the menu.

**NOTE:**
1. When using TV TIME LOCK make sure the clock is set (see page 51).
2. Text appears on the screen to indicate that TV TIME LOCK is activated.
3. If MOVIE/TV Ratings Lock function settings are ON, SURF will be deactivated.

# LOCKS

**Movie Ratings**

Use MOVIE RATINGS to prevent viewing of any movie that you feel may be inappropriate due to its content.




Use the CURSOR buttons ▲ or ▼ to select the MOVIE RATING category that you want to block.
Press SELECT to block the MOVIE RATING that you have selected. Once rating is selected, for example PG-13, all movies rated PG-13 and higher (R, NC-17, and X) will be blocked.
Press EXIT to quit the menu or select MOVIE RATING to return to the previous menu.

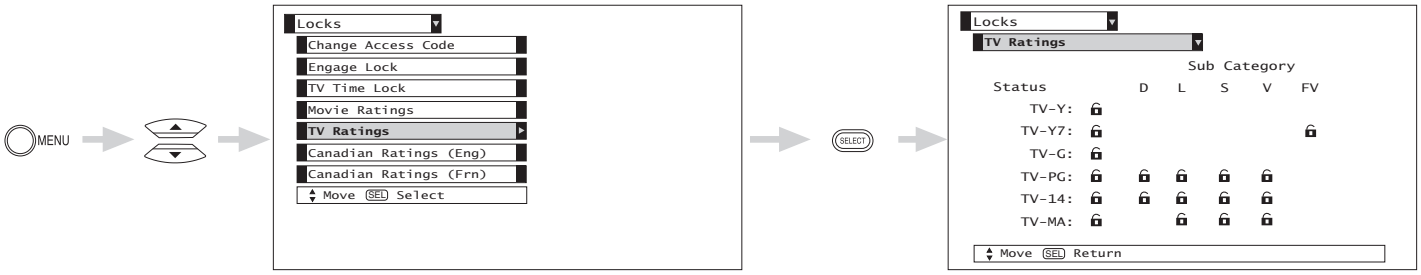
**Motion Picture Ratings Chart**

| | |
|---|---|
| G | **General audiences.** All ages admitted. |
| PG | **Parental guidance suggested**. Some material may not be suitable for children. |
| PG-13 | **Parents strongly cautioned**. Some material may be inappropriate for children under 13. |
| R | **Restricted**. Under 17 requires accompanying parent or adult guardian. |
| NC-17 | **No one 17 and under admitted.** |
| X | **Adults only** |
| NOT RATED (NR) | **Contains no rating. Not Rated (NR) and Not Applicable (NA) programs.** Movie has not been rated or ratings do not apply. |

**NOTES:**
1. A movie rating is dependent upon the movie that is viewed. If the movie does not carry a rating, the TV will not block it.
2. Blocking "NOT RATED (NR)" programs may block emergency programming, sports, news, public service announcements, religious programs and weather.
3. If a CableCARD is installed, your cable operator may provide an Emergency Alert System (EAS) message in the event of a local or national emergency with the purpose of alerting the general public. When you receive such messages, the Projection Television will immediately tune to an EAS channel as directed by the EAS message. Please be advised that if the EAS channel is blocked using the Locks feature, you will not be able to tune to that channel.

**TV Ratings**

Use TV RATINGS to prevent the viewing of any TV program that you feel may be inappropriate due to its content.




Use the CURSOR buttons ▲ or ▼ to highlight the category that you want to block.
Press select to block the TV RATINGS that you have selected.
Press EXIT to quit the menu or select TV RATINGS to return to the previous menu.

**TV Parental Guide Ratings Chart**

| | |
|---|---|
| N/A | **None.** |
| TV-Y | **All children.** The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6. |
| TV-Y7 | **Directed to older children.** Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7. |
| TV-G | **General audience.** It contains little or no violence, no strong language, and little or no sexual dialogue or situations. |
| TV-PG | **Parental guidance suggested.** The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations. |
| TV-14 | **Parents strongly cautioned**. This program may contain sophisticated themes, intense sexual situation, more intense violence and intensely suggestive dialogue. |
| TV-MA | **Mature audiences only.** This program may contain mature themes, indecent language, graphic violence, and explicit sexual content. |
| FV | **Fantasy Violence** |
| V | **Violence** |
| S | **Sexual Situation** |
| L | **Adult Language** |
| D | **Sexually Suggestive Dialogue.** |

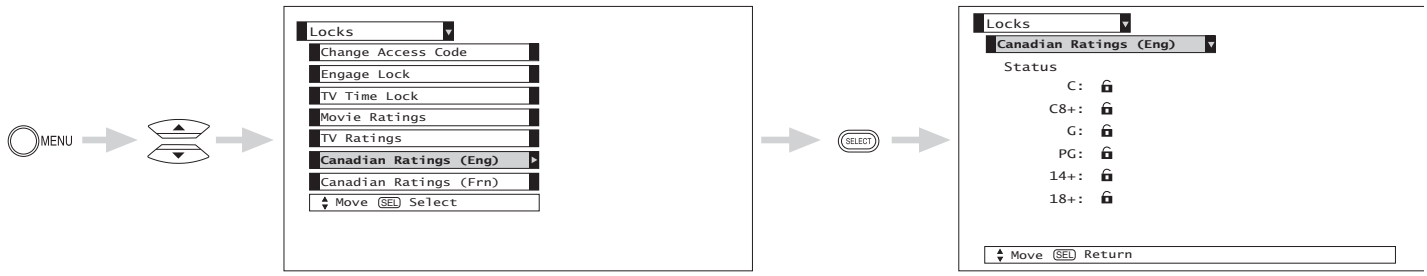
NOTES:

1. If you Block TV-14D, you will still permit TV MA programs; If you block TV-14DV, you will automatically block TV-MAV programs, but you will still permit TV-MALS programs. This means that the TV will block violence in TV-14 and higher (TV-MA), but not language and sex.
2. TV program ratings are dependent on the broadcaster. If the program is not rated, the TV will not block it.
3. If a CableCARD is installed, your cable operator may provide an Emergency Alert System (EAS) message in the event of a local or national emergency with the purpose of alerting the general public. When you receive such messages, the Projection Television will immediately tune to an EAS channel as directed by the EAS message. Please be advised that if the EAS channel is blocked using the Locks feature, you will not be able to tune to that channel.

# LOCKS

**Canadian Ratings (Eng)**

Use Canadian Ratings (Eng) to block any type of movie and television program in Canada that you feel might be inappropriate in its content.



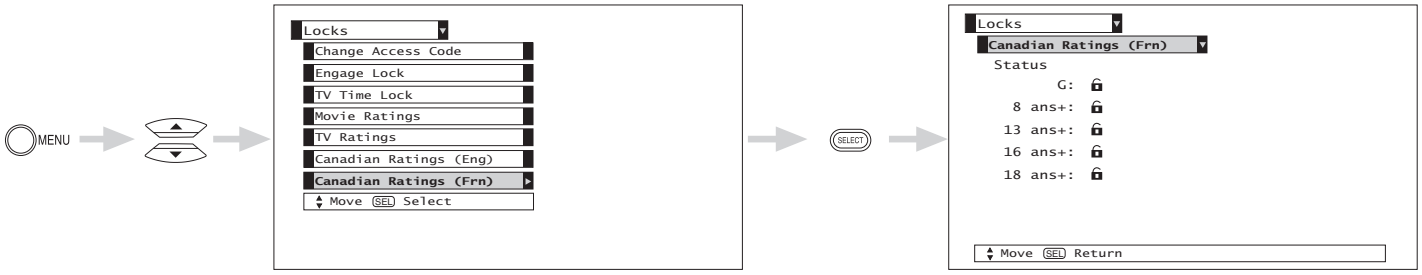

Use the CURSOR buttons ▲ or ▼ to select the CANADIAN RATINGS (Eng) category that you want to block.
Press SELECT to set the CANADIAN RATINGS (Eng) that you have selected. Once rating is selected, for example C8+, all movies and television programs rated C8+ and higher (G, PG, 14+ and 18+) will be blocked automatically.
Press EXIT to quit menu.

**Canadian Ratings English Chart**

| | |
|---|---|
| C | **Programming intended for children under age 8 -** Violence Guidelines; Careful attention is paid to themes, which could threaten children's sense of security and well-being. There will be no realistic scenes of violence. Depictions of aggressive behaviour will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature. Other Content Guidelines: There will be no offensive language, nudity or sexual content. |
| C8+ | **Programming generally considered acceptable for children 8 years and over to watch on their own -** Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict; or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content. |
| G | **General Audience -** Violence Guidelines: Will contain very little violence, either physical or verbal or emotional. Will be sensitive to themes which could frighten a younger child, will not depict realistic scenes of violence which minimize or gloss over the effects of violent acts. Other Content Guidelines: There may be some inoffensive slang, no profanity and no nudity. |
| PG | **Parental Guidance -** Programming intended for a general audience but which may not be suitable for younger children. Parents may consider some content inappropriate for unsupervised viewing by children ages 8-13. Violence Guidelines: Depictions of conflict and/or aggression will be limited and moderate; may include physical, fantasy, or supernatural violence. Other Content Guidelines: May contain infrequent mild profanity, or mildly suggestive language. Could also contain brief scenes of nudity. |
| 14+ | **Programming contains themes or content which may not be suitable for viewers under the age of 14 -** Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Violence Guidelines: May contain intense scenes of violence. Could deal with mature themes and societal issues in a realistic fashion. Other Content Guidelines: May contain scenes of nudity and/or sexual activity. There could be frequent use of profanity. |
| 18+ | **Adult -** Violence Guidelines: May contain violence integral to the development of the plot, character or theme, intended for adult audiences. Other Content Guidelines: May contain graphic language and explicit portrayals of nudity and/or sex. |

**Canadian Ratings (Frn)**

Use CANADIAN RATINGS (FRN) to block Canadian French programs according to various program ratings that you feel might be inappropriate in its content.



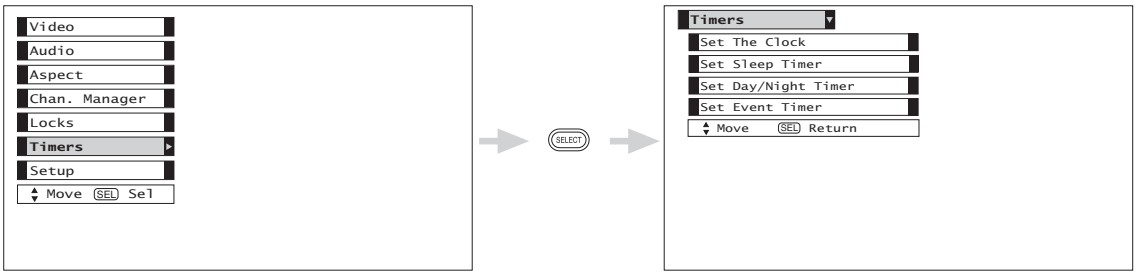

Use the CURSOR buttons ▲ or ▼ to highlight the category that you want to block.
Press SELECT to set the CANADIAN RATINGS (FRN) that you have selected.
Once rating is selected, for example 8 ans+, all movies and television programs rated 8 ans+ and higher will be automatically blocked.
Press EXIT to quit menu or select the CURSOR buttons ◄ to return to the previous menu.

**Canadian Ratings French Chart**

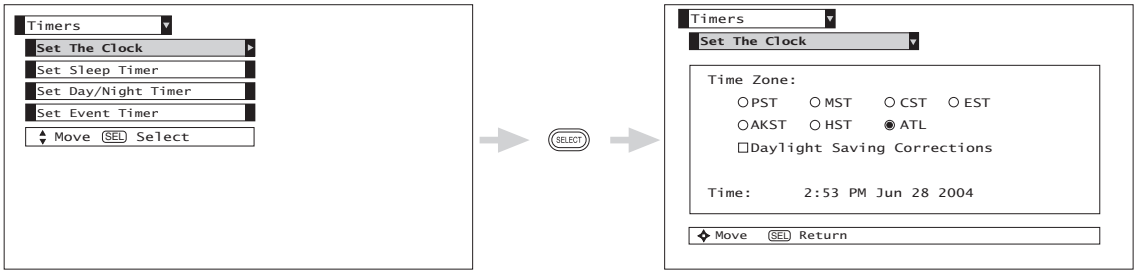
| | |
|---|---|
| G | **General -** Programming intended for audiences of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately with humor or caricature or in an unrealistic manner. |
| 8 ans + | **8 + General - Not recommended for young children -** Programming intended for a broad audience but contains light or occasional violence that could disturb young children. Viewing with an adult is therefore recommended for young children (under the age of 8) who cannot differentiate between real and imaginary portrayals. |
| 13 ans + | **Programming may not be suitable for children under the age of 13 -** Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Viewing with an adult is therefore strongly recommended for children under 13. |
| 16 ans + | **Programming is not suitable for children under the age of 16 -** Contains frequent scenes of violence or intense violence. |
| 18 ans + | **Programming restricted to adults -** Contains constant violence or scenes of extreme violence. |

# TIMERS

**Timers** Select Timers to set your Clock, Sleep Timer, Event Timer and Day/Night Timer Recordings.




**Set The Clock** The Clock must be adjusted before you can use the “Set Event Timer” or Day/Night Timer” feature.

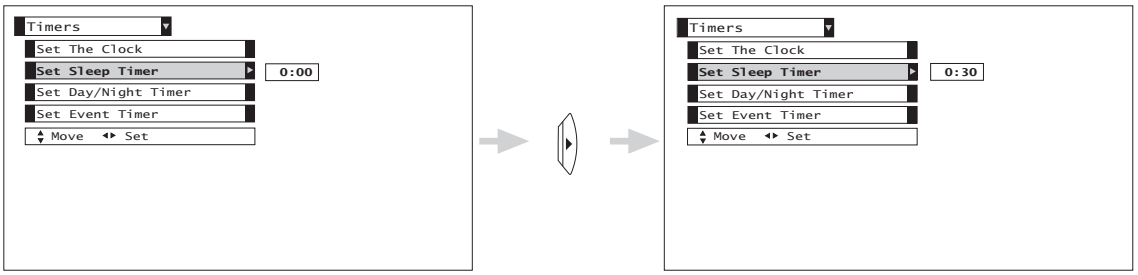



Use the CURSOR buttons ▲, ▼, ◄, ► to highlight the chosen Time Zone settings.
Press the SELECT button to select.
If you observe daylight savings, use CURSOR PAD to highlight “Daylight Saving Correction” and press the SELECT button to select.

Use the CURSOR buttons ▲, ▼, ◄, ► to highlight the current time (hour and minute), AM or PM, Month, Day, and Year.
Use the CURSOR buttons ▲, ▼ to adjust settings.
Press the SELECT button to set the Time and Date.
Press EXIT to quit the menu.

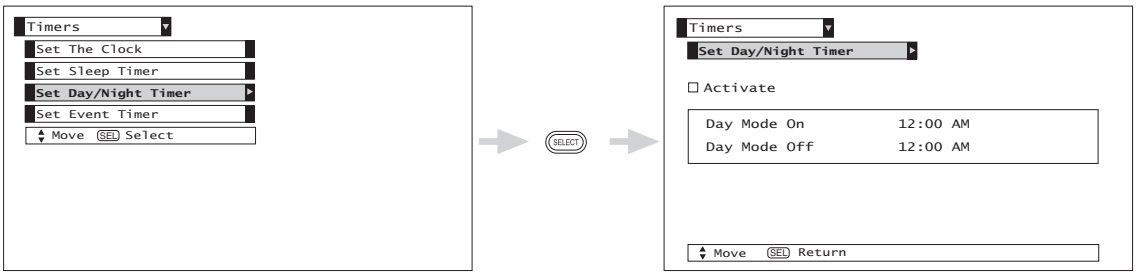
**NOTES:** When “Daylight Saving Correction” is checked “✓”, the TV will automatically calculate the clock adjustment for Daylight Saving.

**Set Sleep Timer** Select this feature to set your Sleep Timer from 30 minutes to 3 hours (30 minute increments).




Press the CURSOR button ▶ repeatedly to set your Timer from 0:00, 0:30, 1:00, 1:30, 2:00, 2:30 and 3:00.

**Set Day/Night Timer** Select this feature to activate and set your TV's Day/Night Picture Mode automatically.

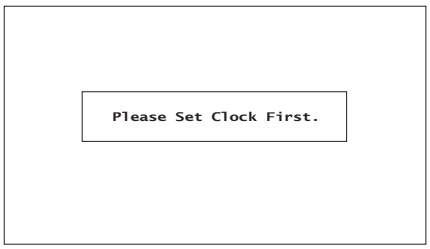


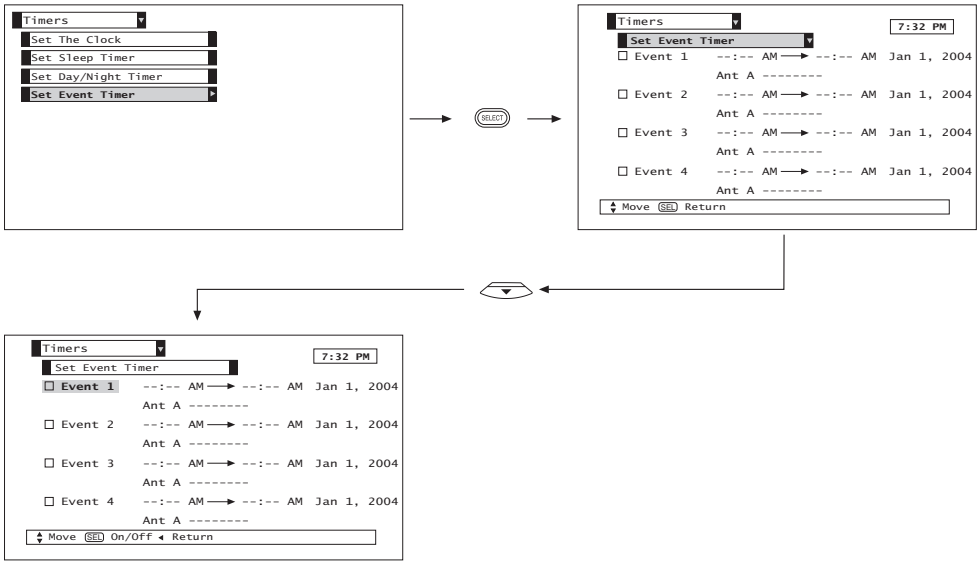

Use the CURSOR buttons and the SELECT button to activate the Day/Night Timer.
Use the CURSOR buttons to select Day Mode On and to set it's timer.
Use the CURSOR buttons to select Day Mode Off and to set it's timer.

# TIMERS

**Set Event Timer**

This function will automatically operate the Projection TV viewing reservation of a program. If the clock is not set, you can not use this function and the screen below will appear. The message on the screen will disappear after 3 seconds, then the screen automatically goes to the clock setup mode (see page 51).





Timers
Set The Clock
Set Sleep Timer
Set Day/Night Timer
Set Event Timer
SELECT
Timers
7:32 PM
Set Event Timer
☐ Event 1 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
☐ Event 2 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
☐ Event 3 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
☐ Event 4 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
Move SEL Return
Timers
7:32 PM
Set Event Timer
☐ Event 1 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
☐ Event 2 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
☐ Event 3 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
☐ Event 4 --:-- AM → --:-- AM Jan 1, 2004
Ant A --------
Move SEL On/Off ◂ Return

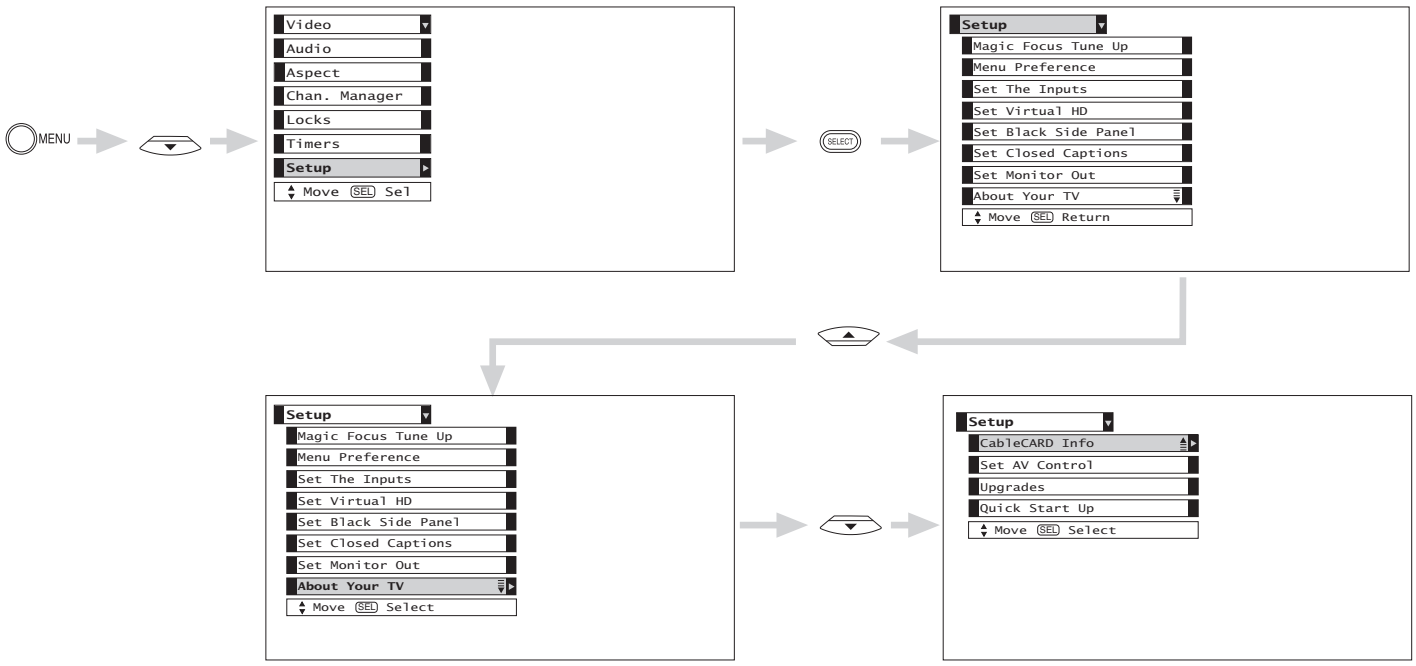
Use the CURSOR buttons ▲, ▼ to highlight Event 1, Event 2, Event 3, Event 4 and then press the SELECT button to select.
Use the CURSOR buttons ▶, ▲, ▼ to highlight and select START TIME Hour/Minute.
Use the CURSOR buttons ▶, ▲, ▼ to highlight and select START TIME AM/PM.
Use the CURSOR buttons ▶, ▲, ▼ to highlight and select FINISH TIME Hour/Minute.
Use the CURSOR buttons ▶, ▲, ▼ to highlight and select FINISH TIME AM/PM.
Use the CURSOR button ▶ to highlight the MONTH.
Use the CURSOR button ▲ to select a MONTH or CURSOR button ▼ to select Daily, Weekly - Sunday to Monday. Use the CURSOR button ◀ to return to MONTH.
Use the CURSOR buttons ▶, ▲, ▼ to highlight and select the DAY of the MONTH.
Use the CURSOR buttons ▶, ▲, ▼ to highlight and select the YEAR.
Use the CURSOR buttons ▶, ▲, ▼ to highlight and select Ant A or Ant B.
Use the CURSOR buttons ▶, ▲, ▼ or NUMBER buttons to set the channel the TV will tune into.
A "✓" in the box means it is enabled.

**NOTE:**
1. When the INFO button is pressed, the Event Timer Icon will only display the current date ON/OFF timer.
2. The Off Timer will only activate if the TV was turned on by the On Timer and no channel selection was made after this time. If you change the channel after the On Timer has been activated, the Off Timer will deactivate.
3. If no remote control button is pressed after viewing reservation is activated, the TV will automatically turn off after three hours. Therefore, do not Set Event Timer for more than three hours if you do not plan to control your television with the remote control.

**CAUTION:** Do not use your TV as a deterrent when away from home by using the On and Off Timers. For safety, the TV should be turned off when you are away from home.

Setup

Select SETUP when setting your TV up for the first time. Use the CURSOR buttons ▲ or ▼ on the remote to highlight the function desired.




Use the CURSOR buttons ▲, ▼, ◄, ► to highlight the sub-menu of your choice.
Press the SELECT button to select.

# SETUP

**Magic Focus Tune Up**

**Auto Digital Convergence Adjustment**
Please turn ON your television for at least 20 minutes before using this feature.

The Magic Focus button on control panel will not work when adjustment mode is set to Manual (see page 56 or 57).

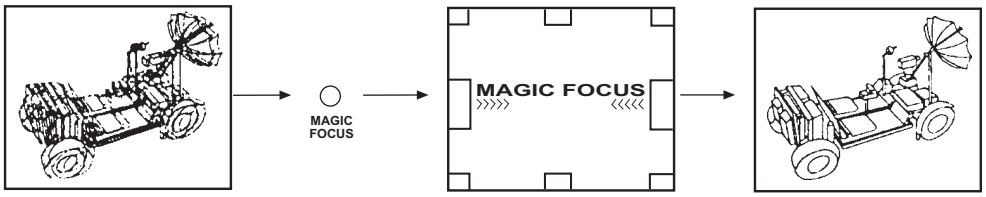
Your HITACHI Projection TV has three color projection tubes: one for red, one for green, one for blue. When mixed together in the proper proportion, the output of these three color tubes can produce any color. To produce these colors, however, the beams must be precisely aligned over each other so that the colors can be mixed. The process of aligning these picture beams is called “convergence”.

Over a period of time, the picture tubes can drift out of alignment due to normal bumps and vibrations or moving the TV. If you move your TV, or if, after a time, you notice color rings or halos around objects in the picture, you may want to converge (align) the colors.

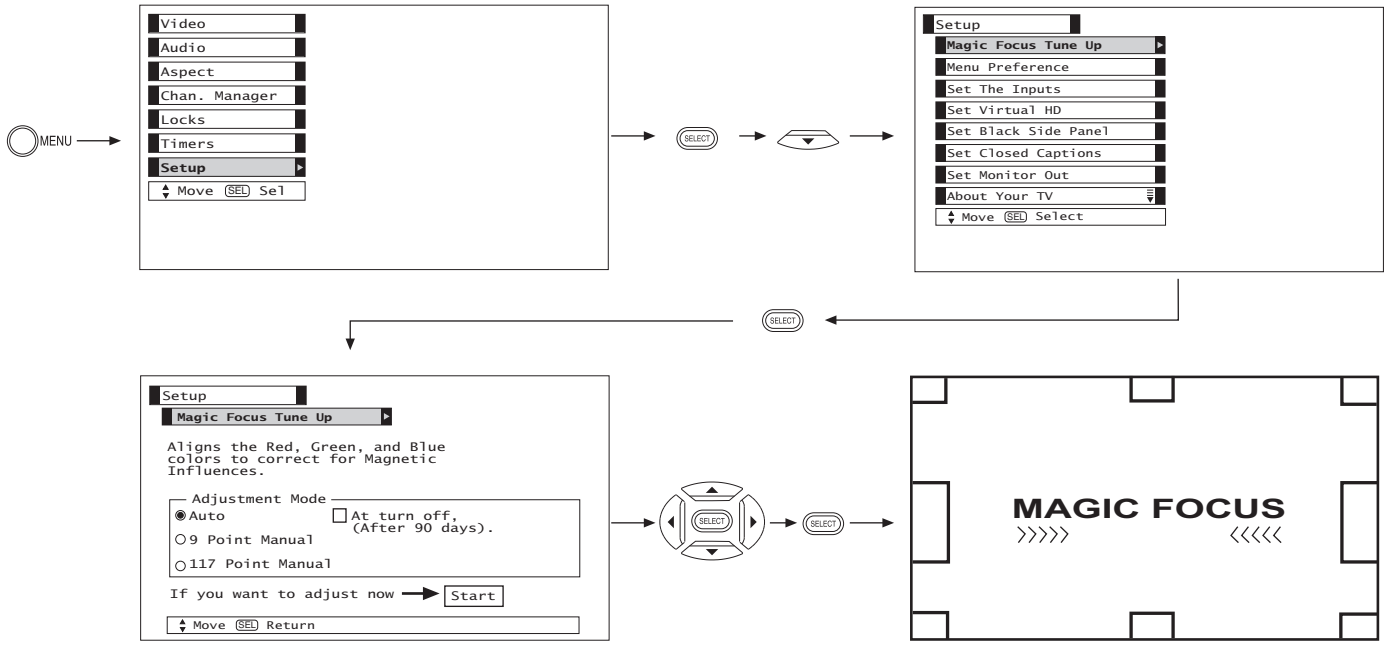
Properly converged, the lines appear white, which is actually a combination of the outputs of the three color tubes. The output of the green tube is stationary. The outputs of the red and blue tubes can be adjusted. When properly aligned, the outputs of all three tubes should be directly over each other to produce the white lines.

To simplify convergence, HITACHI incorporates a function called MAGIC FOCUS located on the front control panel, which allows the TV to self-adjust. Press this MAGIC FOCUS button and the convergence self adjustment will start and this process will take approximately 20 seconds. If this button is pressed during this process, no change in picture quality will occur. After this 20 second self-adjust period, picture quality will be optimum (do not move the TV during self-adjust).

You may also select MAGIC FOCUS TUNE UP from the Setup Menu.




**NOTE:** Only a momentary press of the MAGIC FOCUS button is necessary to start AUTO DIGITAL CONVERGENCE. At any time during this convergence correction process, you may press the MAGIC FOCUS button to exit the MAGIC FOCUS mode. However, the convergence correction process needs to be completed to SAVE the new corrected convergence data.




**NOTE:** When Auto Start “At turn off” is selected, the TV will adjust itself after 90 days.

**Manual Convergence Adjustment Mode (9 Point Manual Adjustment)**

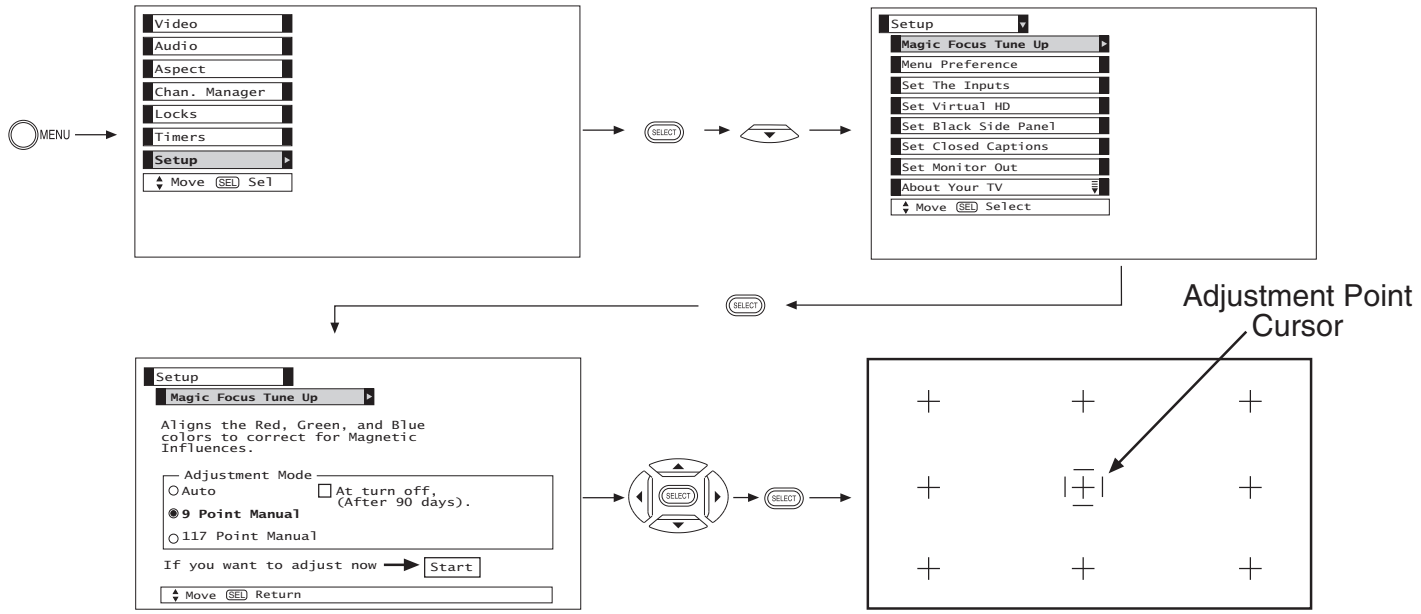
**NOTES:** 1. Please turn ON your television for at least 20 minutes before using this feature.
2. Auto Adjustment Mode is recommended. If convergence is still not acceptable, use the Manual Adjustment Mode.
3. If Auto Adjust mode is selected or the Magic Focus button is pressed, all manual adjust mode settings will be erased.

Using the Remote Control, select SETUP-MAGIC FOCUS TUNE UP-MANUAL ADJUSTMENT MODE-9 POINT MANUAL-START to access convergence 9 point pattern. The adjustment point is indicated by the Adjustment Point Cursor.

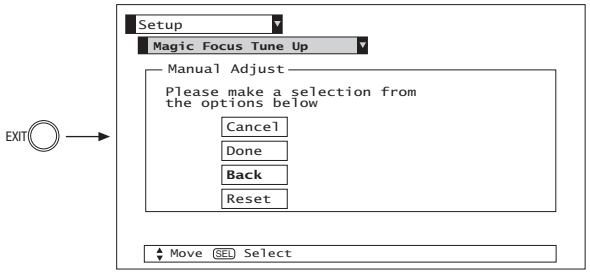
**To Move Adjustment Point**
To move the adjustment point cursor using the CURSOR buttons, the Adjustment Cursor must be WHITE. Another way to move the Adjustment Point Cursor is to press the following buttons: [2] up, [4] left, [5] down, [6] right. If you use the number buttons while the adjustment point is WHITE, it will change to RED.

**To Change the Color of Adjustment Point**
Press the SELECT button repeatedly (WHITE-RED-BLUE-WHITE...). Green color is fixed and cannot be adjusted.

**To Adjust the Convergence**
Move the Adjustment Cursor to the point to be adjusted. Use the CURSOR buttons to match the RED and BLUE colors to GREEN (reference color). Properly aligned, all three colors should appear white.




If convergence is acceptable after Manual Convergence adjustment, press EXIT button to access menu mode.




Use the CURSOR buttons to highlight your chosen option. Press the SELECT button to select.
Select CANCEL to cancel adjusted data and return to main picture.
Select DONE to save your adjustments and return to main picture.
Select BACK to return to the manual convergence adjustment mode.
Select RESET to recall the factory pre-set convergence data.

**Manual Convergence Adjustment Mode (117 Point Manual Adjustment)**

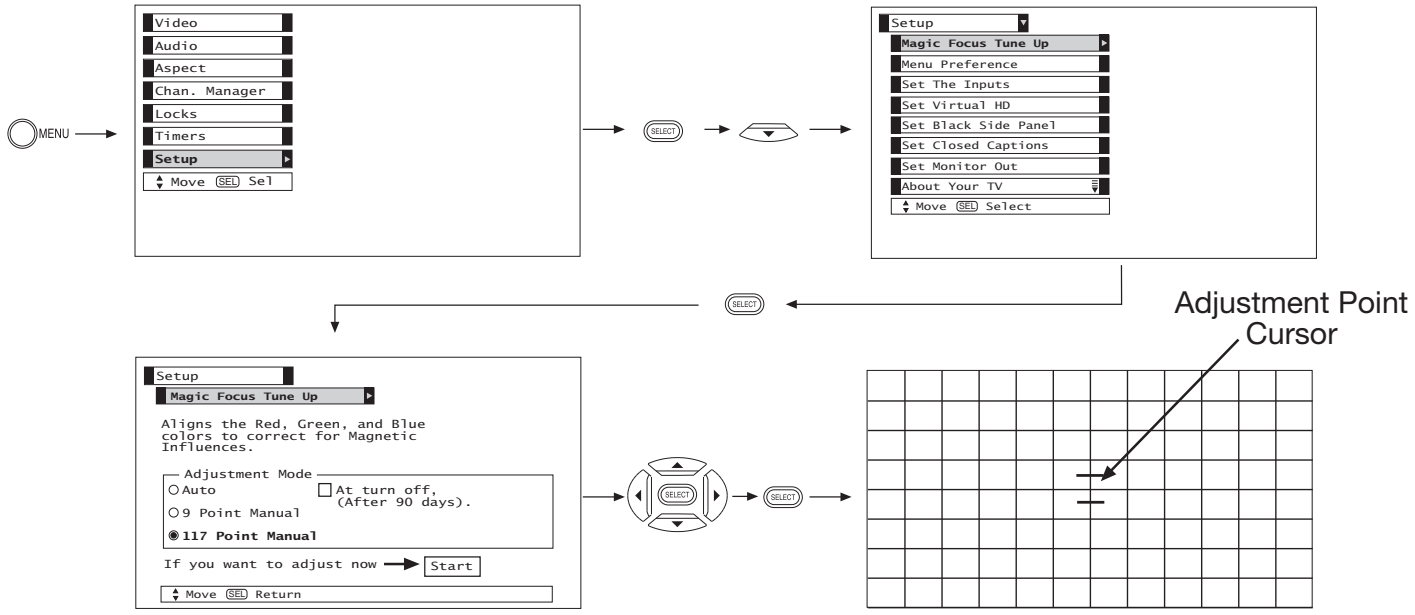
**NOTES:** 1. Please turn ON your television for at least 20 minutes before using this feature.
2. Auto Adjustment Mode is recommended. If convergence is still not acceptable, use the Manual Adjustment Mode.
3. If Auto Adjust mode is selected or the Magic Focus button is pressed, all manual adjust mode settings will be erased.

Using the Remote Control, select SETUP-MAGIC FOCUS TUNE UP-MANUAL ADJUSTMENT MODE-117 POINT MANUAL-START to access convergence 117 point pattern. The adjustment point is indicated by the Adjustment Point Cursor.

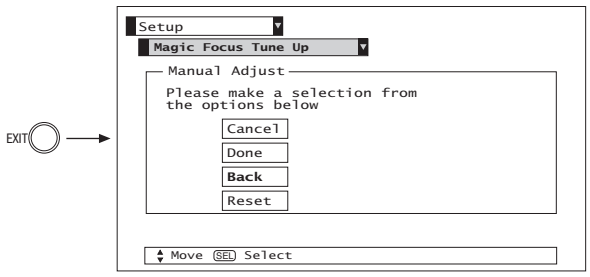
**To Move Adjustment Point**
To move the adjustment point cursor using the CURSOR buttons, the Adjustment Cursor must be WHITE. Another way to move the Adjustment Point Cursor is to press the following buttons: [2] up, [4] left, [5] down, [6] right. If you use the number buttons while the adjustment point is WHITE, it will change to RED.

**To Change the Color of Adjustment Point**
Press the SELECT button repeatedly (WHITE-RED-BLUE-WHITE...). Green color is fixed and cannot be adjusted.

**To Adjust the Convergence**
Move the Adjustment Cursor to the point to be adjusted. Use the CURSOR buttons to match the RED and BLUE colors to GREEN (reference color). Properly aligned, all three colors should appear white.

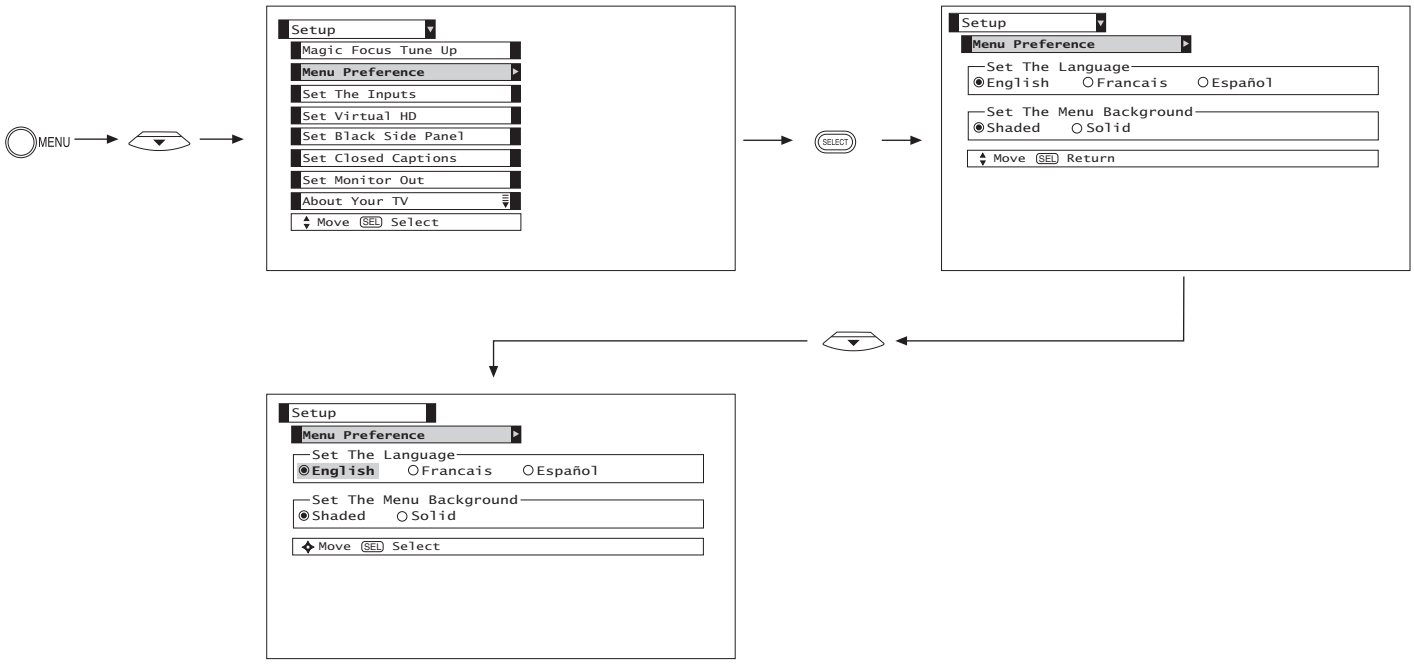



If convergence is acceptable after Manual Convergence adjustment, press EXIT button to access menu mode.




Use the CURSOR buttons to highlight your chosen option. Press the SELECT button to select.
Select CANCEL to cancel adjusted data and return to main picture.
Select DONE to save your adjustments and return to the main picture.
Select BACK to return to the manual convergence adjustment mode.
Select RESET to recall the factory pre-set convergence data.

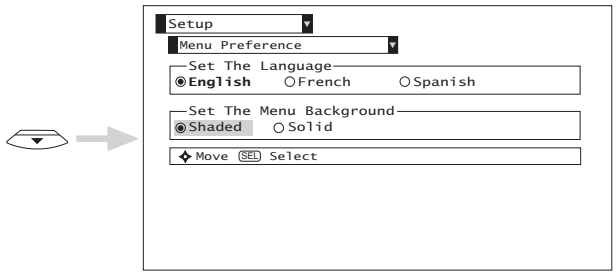
**Menu Preference** This feature will allow you to select any one of three different languages for all on-screen displays.




Use the CURSOR buttons ◄ , ► to highlight the language of your choice.
Press SELECT to select the highlighted language.
Press EXIT to quit menu or select MENU PREFERENCE to return to previous menu.

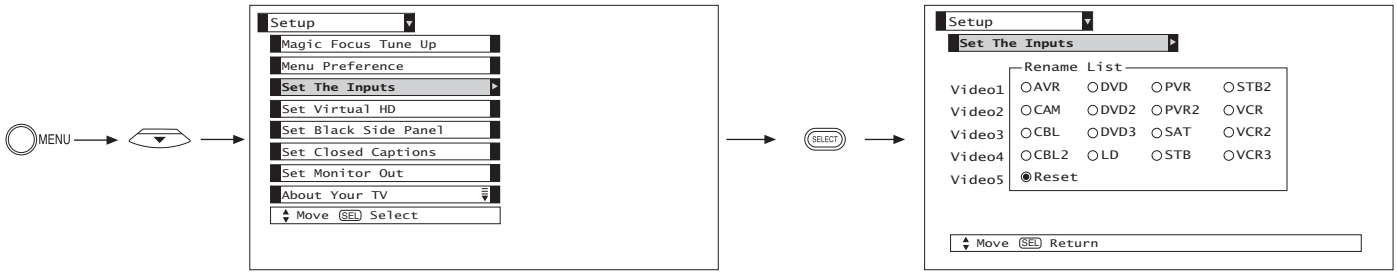
# SETUP

**Menu Background** This function allows you to choose from two menu backgrounds.




Use the CURSOR buttoms ◄ , ► to highlight SET THE MENU BACKGROUND (shaded or solid), and press the SELECT button to select setting.
Press EXIT to quit menu or the CURSOR buttons ◄ to return to previous menu.
Select SOLID for a black background (no picture can be seen behind menu screen), or select SHADED for a light background.

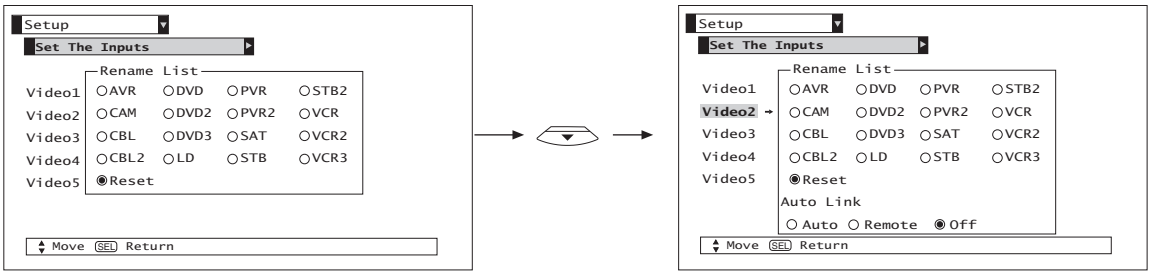
**Set The Inputs** Use this feature to give a name to any of the five video inputs.




Press the CURSOR buttons ▲, ▼, ◄, ►, to highlight the name of the video inputs.
Press the SELECT button to select desired input name.

Select RESET to set video names to original factory preset condition.

**Video 2 Auto Link** Use this function to automatically turn the TV on and tune to Video2 when it detects a video signal to input 2.




Use the CURSOR buttons ◄, ►, ▲ or ▼, then press the SELECT button to change AUTO LINK setting.

When AUTO is selected, the TV will turn on and tune to Video2 automatically, when the Video2 input device is turned on. This is convenient when you want to watch a movie with your VCR, laserdisc player, or DVD player.

When REMOTE is selected, the TV will turn on and switch to Video2 automatically when the Video2 input device is turned on and the VCR, laserdisc, or DVD play button on your remote control is pressed.
This is convenient when you want to record a movie with your VCR and watch it later.

Select Off to disable this function.
Press EXIT to quit menu.

**NOTES:**
1. Once the TV has been turned on using the AUTO LINK feature, it must be reset before AUTO LINK is used again. To do this, turn your VCR, laserdisc, or DVD player OFF. This feature is now reset and will turn on your TV as described above.
2. When using REMOTE mode, any remote control button will substitute for your video input device play button. However, intended operation is for use with your VCR, laserdisc, or DVD play button.
3. If no remote control button is pressed after the TV is turned on by AUTO LINK, the TV will automatically turn off after three hours.

# SETUP

**Set Virtual HD** — Use this feature to select between 1080i and 540p.

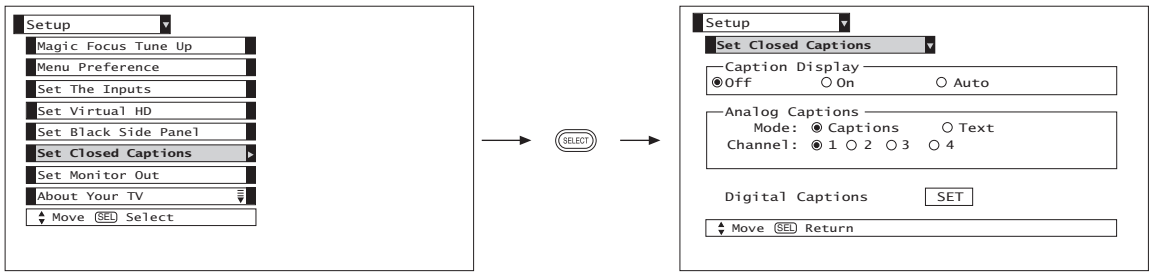
**NOTE:** Set Virtual HD is not available (grayed out) in Digital Channels and 1080i input.

**Set Black Side Panel** — The BLACK SIDE PANEL function turns the gray side bars on/off when watching 4:3 signals in Standard mode. The top/bottom gray bar will appear in SPLIT MODE PIP and SPLIT FREEZE. The TV set will always return to “Set Black Side Panel - OFF” setting every time the TV is powered “OFF”.

**NOTE:** To maximize operating life of the TV’s picture tubes when watching 4:3 signal, Black Side Panel is cancelled at Power OFF. It is recommended to watch 4:3 signal with gray side bar.

**Set Closed Caption**

Closed Captions are the dialogue, narration, and/or sound effects of a television program or home video which are displayed on the TV screen. Your local TV program guide denotes these programs as CC or .




**Caption Display:** **On/Off** will turn the CC display on or off.

**Auto** will turn the CC display on when Mute/Soft Mute is on.

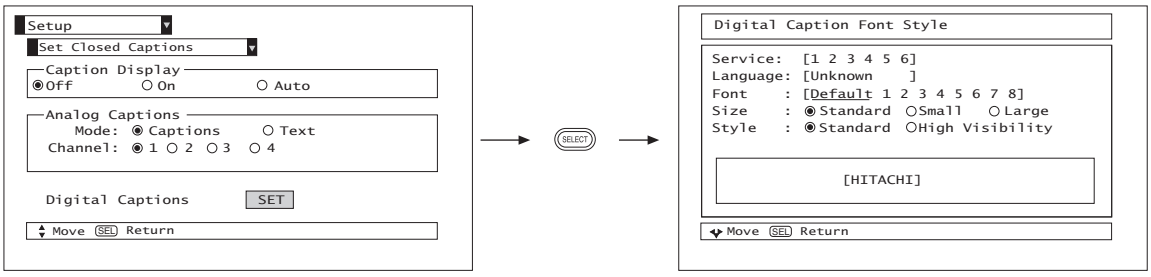
**Caption Mode:** **Captions** is for the program you are viewing.

**Text** is for additional information such as news reports or a TV program guide. This information covers the entire screen and viewing the TV program is not possible. Text may not be available with every CC program.

**CHANNEL:**
**1** is used for the primary language (usually English).
**2** is sometimes used for a second language (may vary by region).
**3** is sometimes used for a third language (may vary by region).
**4** is sometimes used for a fourth language (may vary by region).

Use the CURSOR buttons ▲, ▼, ◀, ▶ to highlight the function to change then press the SELECT button to select the function.
Press EXIT to quit menu or the CURSOR button ◀ to return to previous menu.

**Digital Captions:** Set captions for digital programs. This function will help choose and set available language, font, size and style of digital captions.

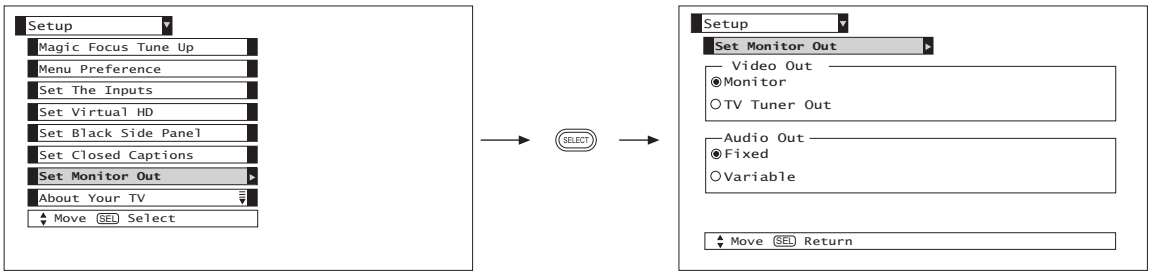



Use the CURSOR buttons ▲, ▼, ◀, ▶ to highlight desired Digital Captions feature.
Press the SELECT button to select desired feature.
Press EXIT to quit menu or the CURSOR button ◀ to return to previous menu.

**NOTES:**
1. Some types of digital closed captions will not work with this TV.
2. CAPTION DISPLAY will not work when viewing a 480p, 720p, or 1080i input via the COMPONENT: Y-$P_BP_R$ inputs.
3. When PIP Surf is on, Closed Caption will not work.
4. Digital Captions Font Style are sometimes different from the Font Style of Analog Captions.
5. Closed Caption and Digital Captions availability and content depends on the broadcaster. Closed Caption is available when Closed Caption icon is displayed on screen.
6. Digital Captions will not be available (grayed out) when using analog channels.

# SETUP

**Set Monitor Out** This feature will select the source of the Monitor Output.




Monitor- Select Monitor to output the audio and video signals of the chosen input source (ANT A, ANT B, VID3-VID5) to a VCR or other A/V device.

TV Tuner Out- Select TV Tuner Out to output the audio and video signals of the last watched Antenna Source (ANT A, ANT B).

Fixed- Select Audio Out Fixed to have the Audio at fixed volume.

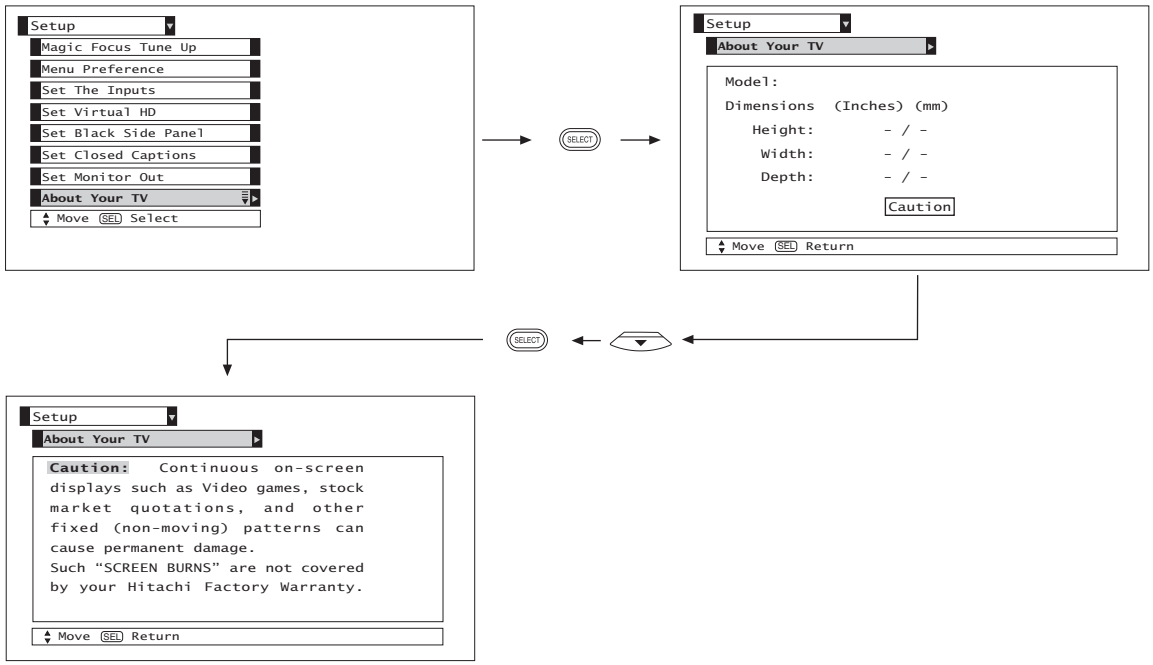
Variable- Select Audio Out Variable to have Audio settings that can be controlled.

Use CURSOR buttons ▲, ▼ to highlight the function to change then press the SELECT button to select the function.

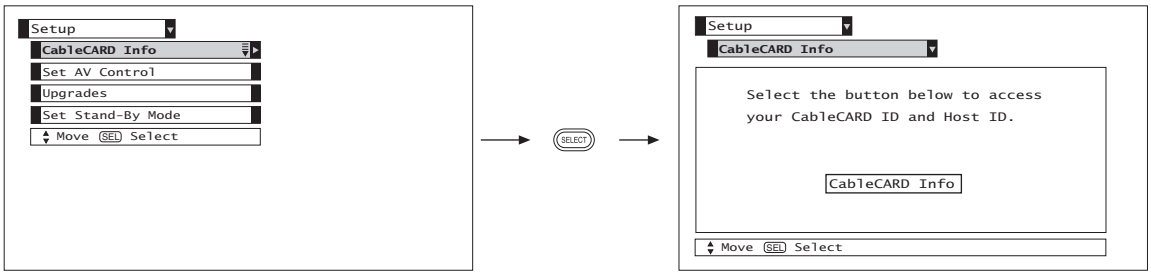
Press EXIT to quit menu or CURSOR button ◄ to return to previous menu.

**NOTE:** When TV Tuner Out is selected, Variable Audio Out will not be available (grayed out).

**About Your TV** The TV model name and dimensions will be displayed on the TV screen. The dimensions of each TV model are listed on page 68.

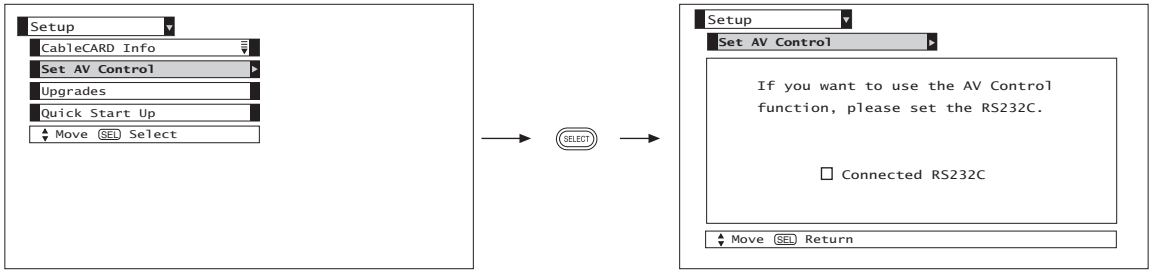



**CableCARD Info** Select this feature to access your CableCARD ID and HOST ID. Please have this information ready when you call your cable operator (see also page 11).



**Set AV Control**

This feature will select the AV Control feature. Set this feature if you want to control some of the TV functions from an external home control system.

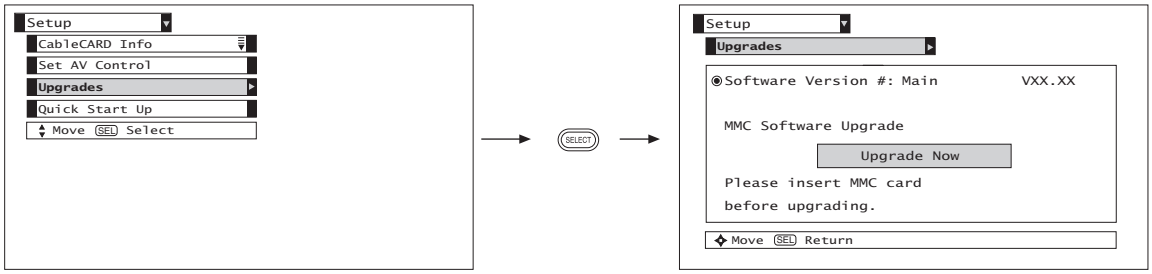



Use the CURSOR buttons and the SELECT button to check the Connected RS232C box.

**NOTE:** For use with third party home Audio/Video control systems which are commercially available. Please see your dealer regarding these "non Hitachi" home control systems.

**Upgrades**

It shows software information and easy upgrade procedure. This function allows the TV software to be upgraded by using a flash card (MMC Card). If a future software upgrade is required for your TV, Hitachi will notify and provide you with a flash card. In order to receive written notification and the flash card, please complete and return the warranty card.

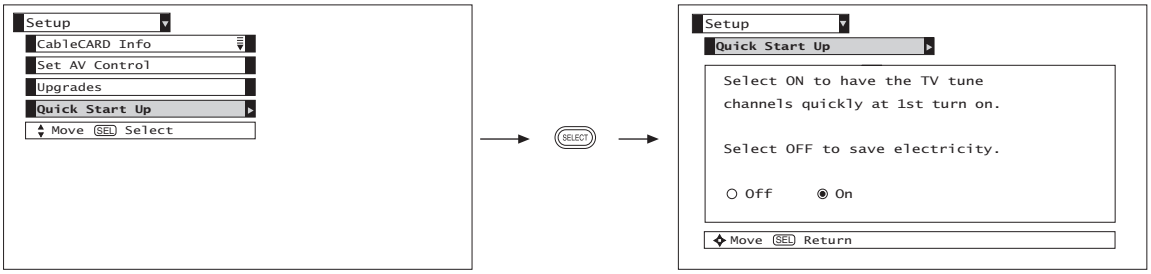



Insert MMC card, then press the CURSOR buttons ▲, ▼ to highlight "Upgrade Now". Press the SELECT button to select and start upgrading.

**NOTE:** Any power interruption during the upgrade process will cancel the upgrade. When this happens, repeat the upgrade procedure.

**Quick Start Up**

This feature will select Quick Start Up options. Set this feature to ON to have the TV tune channels (both Analog and Digital) quickly when first turning the TV on. Set this feature to OFF to save electricity. Selecting ON for the Quick Start Up feature will activate the TV tuners circuits when the TV is in "standby mode" which is commonly referred to as "off". This will allow you to quickly tune to channels when first turning the TV on. Digital signals often change and this feature will monitor any changes and prepare the television to quickly present a picture. A small amount of electricity is used to continually monitor signals when this feature is selected.




**NOTE:** At initial TV Turn "ON", the Power button LED will blink several times before a channel can be tuned and viewed. This is a normal default operation of this television. The blinking time of the Power button LED varies depending on the period of time between when you turn "ON" and when you turn "OFF" the TV. This default operation is an energy saving feature. You can choose not to use this feature by selecting "On" for the "Quick Start Up" option in the On-Screen-Display Menu. Select "Setup" in the On-Screen-Display Menu, then select "Quick Start Up". Select the "On" feature to quickly tune and view channels at initial TV Turn "ON."

# CARE OF YOUR HITACHI TELEVISION AND YOUR REMOTE CONTROL

**DO**

Dust the screen and cabinet with a soft cloth.

Clean the screen with a soft cloth moistened in warm water and dry with a soft cloth. A mild soap may be used if the screen is extremely dirty.

Place your Television away from extreme heat, humidity, and extremely dusty places.

Remove the plug from the wall outlet if your Television will not be used for a long period of time, for instances, when you go on vacation.

**DO NOT**

Do not clean your screen or cabinet with strong cleaners, polishes or a chemically treated cloth.

Do not place rubber or vinyl products or cellophane tape on your Television.

Do not touch the screen too often.

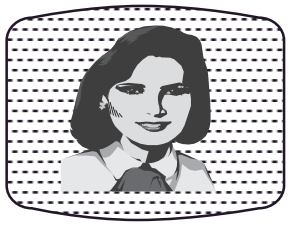
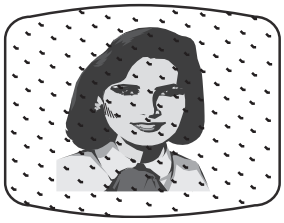
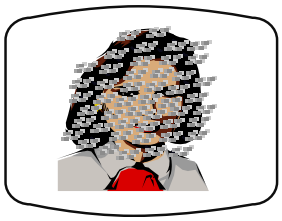
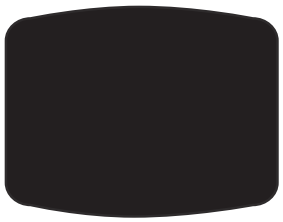
Do not subject the remote control to shocks such as dropping it on the floor, etc. Physical damage to the precision parts may result.

Avoid placing the remote control or the Simple Remote Control in a high humidity place or getting it wet. Do not leave it on or near a heater. Excessive heat or moisture may cause the unit to cease operation.

When the batteries run down, remote control operation will become erratic or possibly stop altogether. Replace the old batteries with two new “AA” size batteries as soon as possible to preserve the remote control precodes that were set for the devices. Pressing a remote control button with a “DEAD” battery might erase all precodes in memory. Do not use an old battery with a new battery.

Exposure of the viewing screen to prolonged direct sunlight or heat may cause the screen to permanently warp, resulting in a distorted picture.

# RECEPTION PROBLEMS

| | |
|---|---|
|  | • IGNITION NOISE:<br>Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances. |
| | • GHOSTS:<br>Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other objects. Changing the direction or position of the antenna may improve reception. Ghosting may also be caused by defects in the antenna system such as unshielded leads or connecting several sets to the same antenna without using multiple antenna couplers. |
|  | • SNOW:<br>If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture. |
| | • RADIO FREQUENCY INTERFERENCE:<br>The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture. |
|  | • BLOCK NOISE (Digital Input):<br>Fuzzy blocks may appear in some area or the whole area of the screen. This is usually caused by interference from automobile ignition systems, neon lamps, electrical drills, ghosting of the image and weak signals. |
|  | • BLACK SCREEN:<br>When using an antenna, weak signals will display a black screen. It may be necessary to upgrade your antenna. |

**NOTE:** The TV set can generate sound distortion in external devices such as a radio. Please separate radio equipment from the TV set to a considerable distance.

| SYMPTOMS | CHECK THESE ITEMS AND TRY THESE ADJUSTMENTS: Be sure external connection is correct | Be sure power cord is plugged in | Be sure TV is switched "ON" | Try another channel (station trouble) | Check antenna connections (back of TV) | Check antenna for broken lead-in wire | Check outside antenna | Check for local interference | Adjust Contrast control | Adjust Brightness control | Adjust Color control | Adjust Tint control | Adjust Volume control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No Picture, no sound | ● | ● | ● | ● | ● | ● | ● | | | | | | |
| Sound OK, picture poor | ● | | | ● | ● | ● | ● | ● | ● | ● | | | |
| Picture OK, sound poor | ● | | | ● | ● | ● | ● | ● | | | | | ● |
| Picture blurred | ● | | | ● | ● | ● | ● | ● | | | | | |
| Lines or streaks in picture | | | | ● | ● | ● | ● | ● | | | | | |
| Poor reception on some channels | | | | ● | ● | ● | ● | ● | | | | | |
| Picture rolls vertically | | | | ● | | | | ● | | | | | |
| No color | ● | | | ● | ● | ● | ● | | | | ● | | |
| Poor color | ● | | | ● | ● | ● | ● | | | | ● | ● | |

HITACHI Projection Television incorporates advanced power surge protection technology designed to protect against component or circuit damage due to external or internal voltage power surges.

IF YOUR TELEVISION SHOULD APPEAR TO HAVE A LOSS OF POWER, PLEASE FOLLOW THIS PROCEDURE:

1. Press the power switch (ON/OFF switch) once.
2. If there is still no power, wait 30 seconds and press the power switch again.
3. If there is still no power, unplug the power cord from the wall. Wait 30 seconds and plug the power cord back in. Press the power switch again.

This protective technology should provide for years of lasting entertainment from your HITACHI Projection Television.

**Features:**

- Superfine Picture Quality
  1280 Line Horizontal Resolution
- Remote (Controls many PVR/VCR brands, cable boxes, satellite boxes, and other audio equipment).
- New Easy-to-Use (3-Language) On-Screen Menu
- Full Set of Input Jacks, including S-VIDEO
- COMPONENT VIDEO: Y-$P_B/P_R$
- Velocity Modulation
- Six Aspect Modes
- Closed Caption Decoder
- 2-Tuner Picture in Picture
- Magic Focus (Auto Digital Convergence and 9-point/117-point Manual Adjustment)
- 2 Antenna Inputs (Either for Analog/Digital)
- Video Input Sensor
- HDMI (High Definition Multimedia Interface) (High Bandwidth Digital Content Protection V1.1 compatible).
- Digital Audio Output (Dolby® Digital and PCM)
- 3 Dimensional Y/C Comb Filter
- Compatible with 1080i, 720p, 480p and 480i input signals.
- CableCARD™ compatible - Contact your local cable operator for more information.
- BBE Technology.
  *Licensed by BBE Sound, Inc. under USP5510752 and 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc. Manufactured under license from BBE Sound, Inc.
- SRS Technology.
  *SRS and (●) symbol are trademarks of SRS Labs, Inc. SRS technology is incorporated under license from SRS Labs, Inc.
- DOLBY DIGITAL* Technology.
  *Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.
- HDMI Technology
  *HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

**Inputs:**

- Power Input . . . . . .AC 120V, 60Hz
- Stand-by Power . . . . . .0.4W
- Power Consumption
  - Refer to rear panel at the back of the T.V.
- Antenna input impedance . . . . . .75 Ohm
- Channel coverage
  VHF-Band . . . . . .2 ~ 13
  UHF-Band . . . . . .14 ~ 69
  CATV Band . . . . . .1-135
  . . . . . .A-I
  - Video . . . . . .1.0Vp-p, 75 Ohm
- S-Video
  Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  Chrominance (C) . . . . . .0.286Vp-p, 75 Ohm
- Component Video
  Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  Chrominance ($P_B/P_R$) . . . . . .0.7Vp-p, 75 Ohm
- Audio input Impedance . . . . . .47k Ohm
- Average input level . . . . . .470mVrms
- HDMI . . . . . .HDMI 19 PIN

**Outputs:**

- Video . . . . . .1.0Vp-p. 75 Ohm
- Audio (Fixed) . . . . . .470mVrms, 1k Ohm
- S-Video
  Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  Chrominance (C) . . . . . .0.286Vp-p, 75 Ohm
- Optical Out (Digital Audio) . . . . . .
  . . . . . .1 optical connector

**Dimensions:**

| | 51F710<br>51F710S | 57F710<br>57F710S | 65F710<br>65F710S |
|---|---|---|---|
| • Height (in.) | 50 3/8 | 54 9/16 | 59 15/16 |
| (mm) | 1,279.0 | 1,385.6 | 1,521.0 |
| • Width (in.) | 48 3/4 | 54 | 61 |
| (mm) | 1,239.0 | 1,372.0 | 1,549.0 |
| • Depth (in.) | 21 7/8 | 23 5/8 | 25 3/8 |
| (mm) | 557 | 599.4 | 644 |
| • Weight (lbs.) | 187.4 | 205 | 309 |

**NOTE:** Due to improvements, specifications in this operating guide are subject to change without notice.

# HITACHI

*service hotline*

To locate an authorized HITACHI service facility in the continental U.S.A. and Canada,

**DIAL TOLL FREE**

7 days a week, 24 hours a day

**800 HITACHI**

**(1-800-448-2244)**

## Hitachi America, LTD.
## Home Electronics Division

Hitachi has made every effort to assure you hours of trouble free operation from your unit. However, should you require service, a network of Hitachi Authorized Service Facilities has been established in all 50 states and Puerto Rico. Each facility will provide you with convenient and expedient assistance. Our service hotline operator will direct you to the Hitachi Authorized Service Facility nearest you. Just present proof of purchase and/or delivery receipts to the Hitachi Authorized Service Facility, and service will be rendered in accordance with the terms of the limited warranty as stated on your warranty card or operating guide.

***Should you have any questions regarding warranty, service, operation, or technical assistance, please contact:***

**Hitachi America, LTD.**
**Home Electronics Division**
900 Hitachi Way
Chula Vista, CA 91914-3556

# Hitachi Canada, LTD.
# Digital Media Division

***Should you have any questions regarding warranty, service, operation, or technical assistance, please contact:***

**In Canada:**
**1-800-HITACHI**
**(1-800-448-2244)**

**Monday - Friday EST 9:00am - 7:00pm**
**Saturday EST 9:00am - 5:00pm**

***Look for your French Manual on the outside of the box.***
***If the manual is missing, call***

**1-800-HITACHI**
**(1-800-448-2244)**

***for a copy.***

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***Pour de plus amples renseignements sur le service durant la période couverte par la garantie, sur le fonctionnement ou pour de l'assistance technique communiquez avec:***

**Au Canada:**
**1-800-HITACHI**
**(1-800-448-2244)**

**Lundi - Vendredi L'EST 9:00am - 7:00pm**
**Samedi L'EST 9:00am - 5:00pm**

***La version français de votre manual se trouve a l'exterieur de la boîte.***
***Si le manuel est manquant, coposez le***

**1-800-HITACHI**
**(1-800-448-2244)**

***pour obenir votre copie.***

**HITACHI CANADA, LTD.**
**2495 Meadowpine Blvd.**
**Mississauga, Ontario L5N 6C3**

# 57” DISASSEMBLY/ASSEMBLY INSTRUCTIONS

**IMPORTANT POINTS:**
(a) Do not attempt to perform this work by yourself.
(b) Request an installation specialist to install this unit.
(c) HITACHI assumes no responsibility or liability for injury/damage as a result of consumer installation and handling. Be advised that improper consumer installation/handling is not covered by manufacturer’s warranty.
(d) This Projection Television weighs 205 pounds and has many sensitive components.

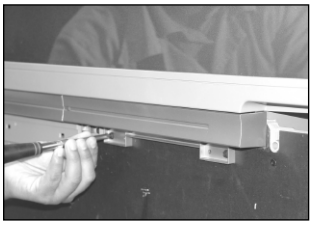
**CAUTION: DISCONNECT UNIT FROM POWER SOURCE BEFORE DISASSEMBLY / ASSEMBLY**

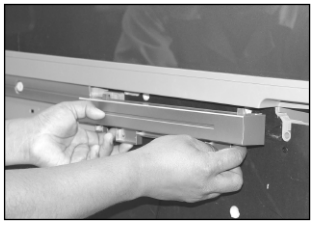
## 1 - SEPARATION PROCEDURE (Note: read all instructions and understand how to properly and safely disassemble and assemble unit)

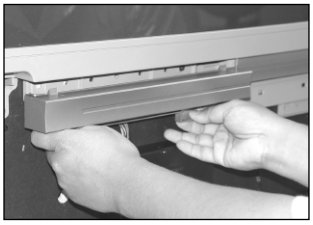
**STEP 1** Before disassembling this projection TV set, you must first remove the speaker grille by grabbing the sides and pulling left and right side see (a)(b). Remove the front decoration panels by unscrewing the 2 screws from each panel, see (c), then remove from the original position, see (d)(e).

(a)

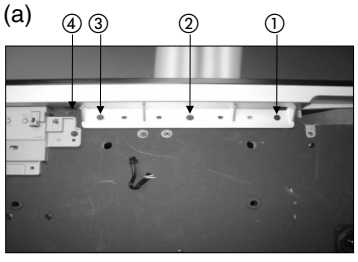
(b)

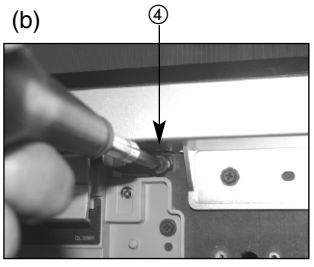
(c)


(d)


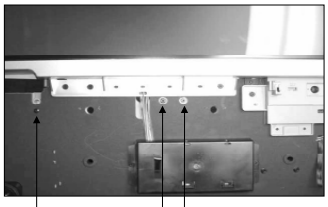
(e)


**STEP 2** Remove 4 screws (①,②,③,④) that hold the screen frame to the cabinet on the Right side, see (a) and (b). Repeat to remove 4 screws on the Left side.

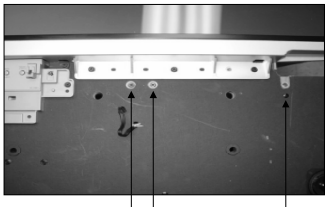
(a)



(b)


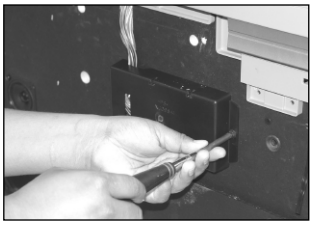

**STEP 3** Please remove 3 screws (①,②,③) below screen frame that hold the back cover to the cabinet as the arrows shows, see (a).

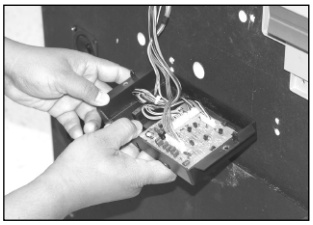
(a) Left Side



Please remove 3 screws (①,②,③) below screen frame that hold the back cover to the cabinet as the arrows shows, see (b).

(b) Right Side



**STEP 4** Remove the sensor box by unscrewing the 2 screws located on both sides of the sensor box, see (a). Rotate the sensor box and there are 4 low voltage connectors located on the sensor board, see (b). Disconnect the connector with the brown wires (PDSE), see (c) and (d). (Make sure to push the center lock on the connector at the unplug time.)

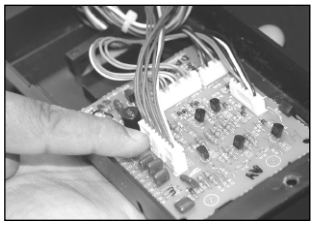
(a)


(b)


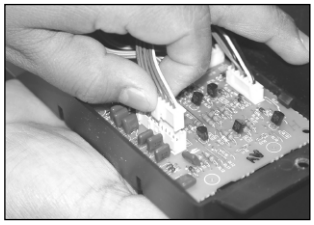
## 1 - SEPARATION PROCEDURE CONTINUED

**STEP 4** Cont.

(c)



(d)



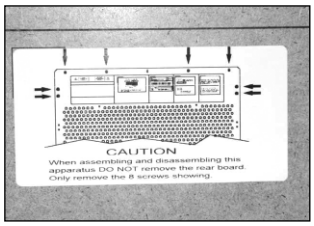
**STEP 5** Remove the joint connector bolts from each side of the back cover using the allen wrench that is provided inside of the instruction bag, see (a) and (b).

(a)

(b)

**STEP 6** Remove from the back side of the TV set only the top 4 screws of the lower rear cover, see (b), as shown by the arrows on the rear cabinet label, see (a). Do not remove the rear cover board. Remove the (4) four side screws that hold the back cover to the cabinet, see (c) as shown on the label (a). Total of 8 screws will be removed.

(a)


CAUTION
When assembling and disassembling this apparatus DO NOT remove the rear board.
Only remove the 8 screws showing.

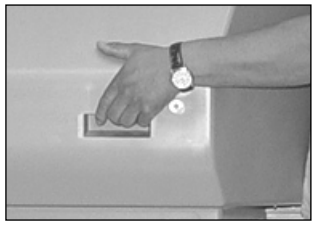
(b)

(c)

**STEP 7** **Caution:** When the TV is separated, the top portion weights 45 lbs. This task should be done by two persons when separating this TV. This assembly contains fragile parts, such as glass and the viewing screen. Avoid any type of impact that could cause breakage of these components. Remove top portion by grabbing the bottom corner of frame and the back cover, see (a)(b). Lift upwards, see (c)(d), gently place the top portion on the the floor, see (e).

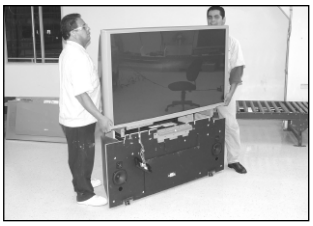
(a)

(b)



(c)

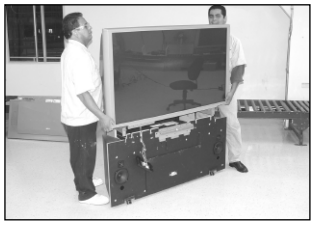
(d)



(e)

## 2 - RE-ASSEMBLY PROCEDURE

**STEP 8** To re-assemble the set, lift the top portion and align onto the bottom cabinet. Gently lower the top portion until it sits flush on the bottom.



**STEP 9** Re-install the joint connector bolts (4 pcs.) that were removed in step 5 of the disassembly.

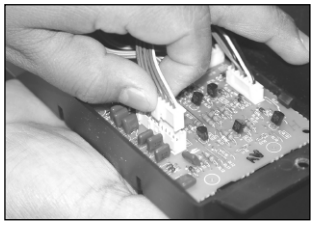
**STEP 10** Re-install the top (4) four screws into the lower rear cover, see (a). Re-install the (4) four side screws that hold the back cover to the cabinet, see (b).

(a)

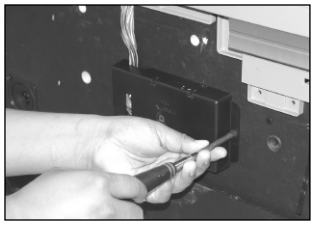
(b)

**STEP 11** Re-connect the sensor connector to the sensor board, see (a). Re-install the sensor box, see (b).

(a)

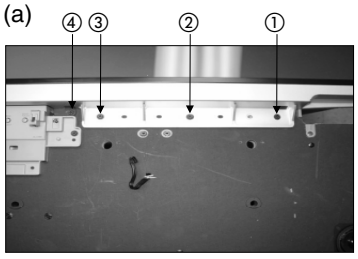


(b)

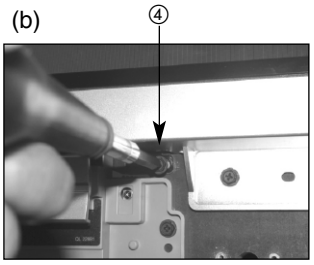


**STEP 12** Re-install 4 screws (①,②,③,④) that hold the screen frame to the cabinet on the Right side, see (a) and (b). Repeat to re-install 4 screws on the Left side.

(a)

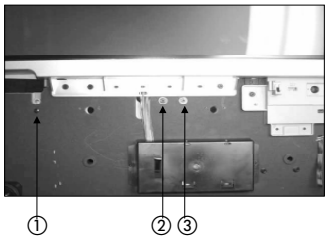



(b)



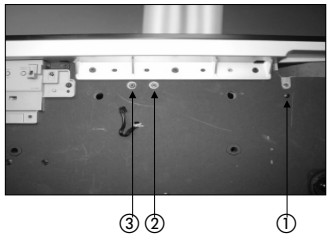

**STEP 13** Please re-install 3 screws (①,②,③) below screen frame that hold the back cover to the cabinet as the arrows shows.

(a) Left Side



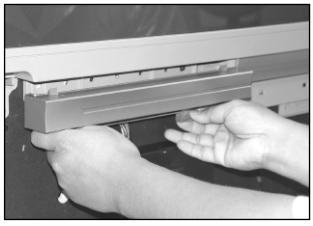

Please re-install 3 screws (①,②,③) below screen frame that hold the back cover to the cabinet as the arrows shows.

(b) Right Side

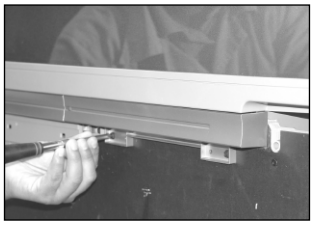



**STEP 14** Re-install both of the front decoration panels, see (a) and (b). Re-install the speaker grille, aligning it with the bottom cabinet, see (c). This completes the Disassembly and Assembly instructions.

(a)



(b)



(c)

**IMPORTANT POINTS:**

(a) Do not attempt to perform this work by yourself.
(b) Request an installation specialist to install this unit.
(c) HITACHI assumes no responsibility or liability for injury/damage as a result of consumer installation and handling. Be advised that improper consumer installation/handling is not covered by manufacturer’s warranty.
(d) This Projection Television weighs 309 pounds and has many sensitive components.

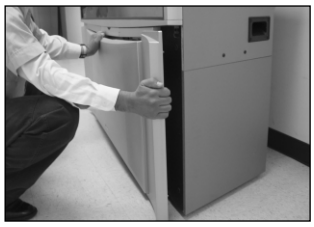
**CAUTION: DISCONNECT UNIT FROM POWER SOURCE BEFORE DISASSEMBLY / ASSEMBLY**

## 1 - SEPARATION PROCEDURE (Note: read all instructions and understand how to properly and safely disassemble and assemble unit)

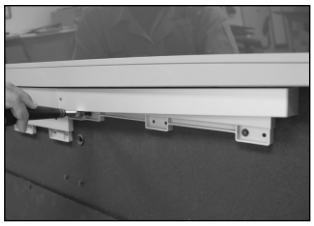
**STEP 1** Before disassembling this projection TV set, you must first remove the speaker grille by grabbing the sides and pulling left and right side see (a)(b). Remove the front decoration panels by unscrewing the 2 screws from each panel, see (c), then remove from the original position, see (d)(e).

(a)

(b)



(c)



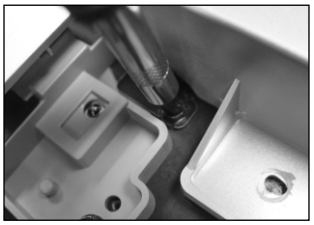
(d)

(e)

**STEP 2** Remove the 8 screws that hold the screen frame to the cabinet on the front side. DO NOT remove the right and left edge screen frame screws (c).

(a)

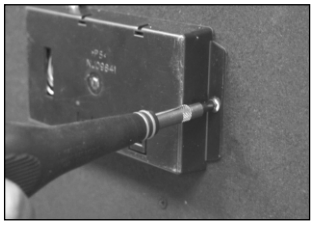
(b)



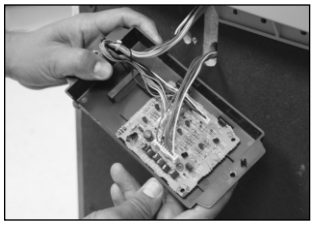
(c)

**STEP 3** Remove the sensor box by unscrewing the 2 screws located on both sides of the sensor box, see (a). Rotate the sensor box and there are 4 low voltage connectors located on the sensor board, see (b). Disconnect wires (PDSE), see (c) and (d). (Make sure to push the center lock on the connector at the unplug time.)

(a)



(b)

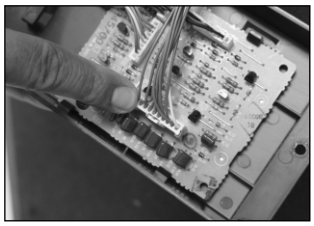


# 65” DISASSEMBLY/ASSEMBLY INSTRUCTIONS

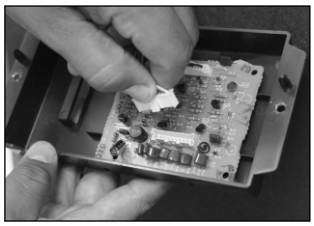
## 1 - SEPARATION PROCEDURE CONTINUED

**STEP 3** Cont.

(c)



(d)



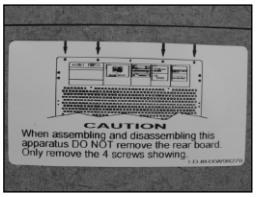
**STEP 4** Remove the joint connector bolts from each side of the TV set using the allen wrench that is provided inside of the instruction bag, see (a) and (b).

(a)

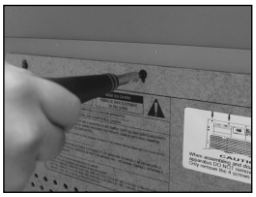
(b)

**STEP 5** Remove from the back side of the TV set only the top 4 screws of the lower rear cover, see (b), as shown by the arrows on the rear cabinet label, see (a). Do not remove the rear cover board.

(a)


CAUTION
When assembling and disassembling this apparatus DO NOT remove the rear board. Only remove the 4 screws showing.

(b)



**STEP 6** **Caution:** When the TV is separated, the top portion weighs 112 lbs. This task should be done by two persons to carry top portion when separating this TV. This assembly contains fragile parts, such as glass and the viewing screen. Avoid any type of impact that could cause breakage of these components. Remove top portion by grabbing the bottom corner of frame and the side of the TV, see (a)(b). Lift upwards, see (c)(d), gently place the top portion on the the floor, see (e).

(a)

(b)

(c)

(d)

(e)

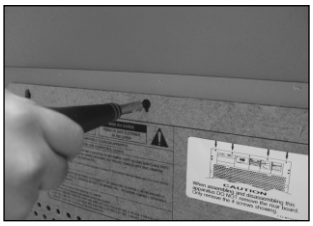
## 2 - RE-ASSEMBLY PROCEDURE

**STEP 7** To re-assemble the set, lift the top portion and align onto the bottom cabinet. Gently lower the top portion until it sits flush on the bottom.

**STEP 8** Re-install the joint connector bolts (4 pcs.) that were removed in step 4 of the disassembly.

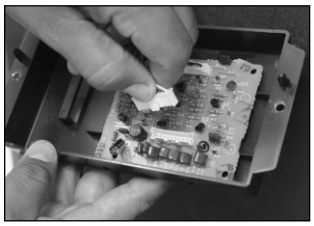
**STEP 9** Re-install the top (4) four screws into the lower rear cover, see (a).

(a)

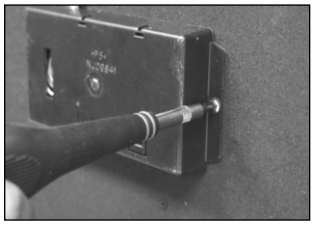


**STEP 10** Re-connect the sensor connector to the sensor board, see (a). Re-install the sensor box, see (b).

(a)



(b)



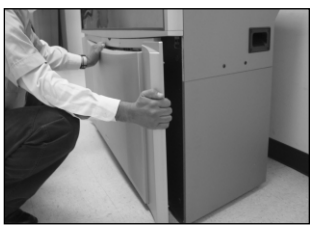
**STEP 11** Re-install the 8 screws that hold the frame to the cabinet on the front side of the TV.

**STEP 12** Re-install both of the front decoration panels, see (a) and (b) Re-install the speaker grille, aligning it with the bottom cabinet, see (c). This completes the Disassembly and Assembly instructions.

(a)

(b)

(c)



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